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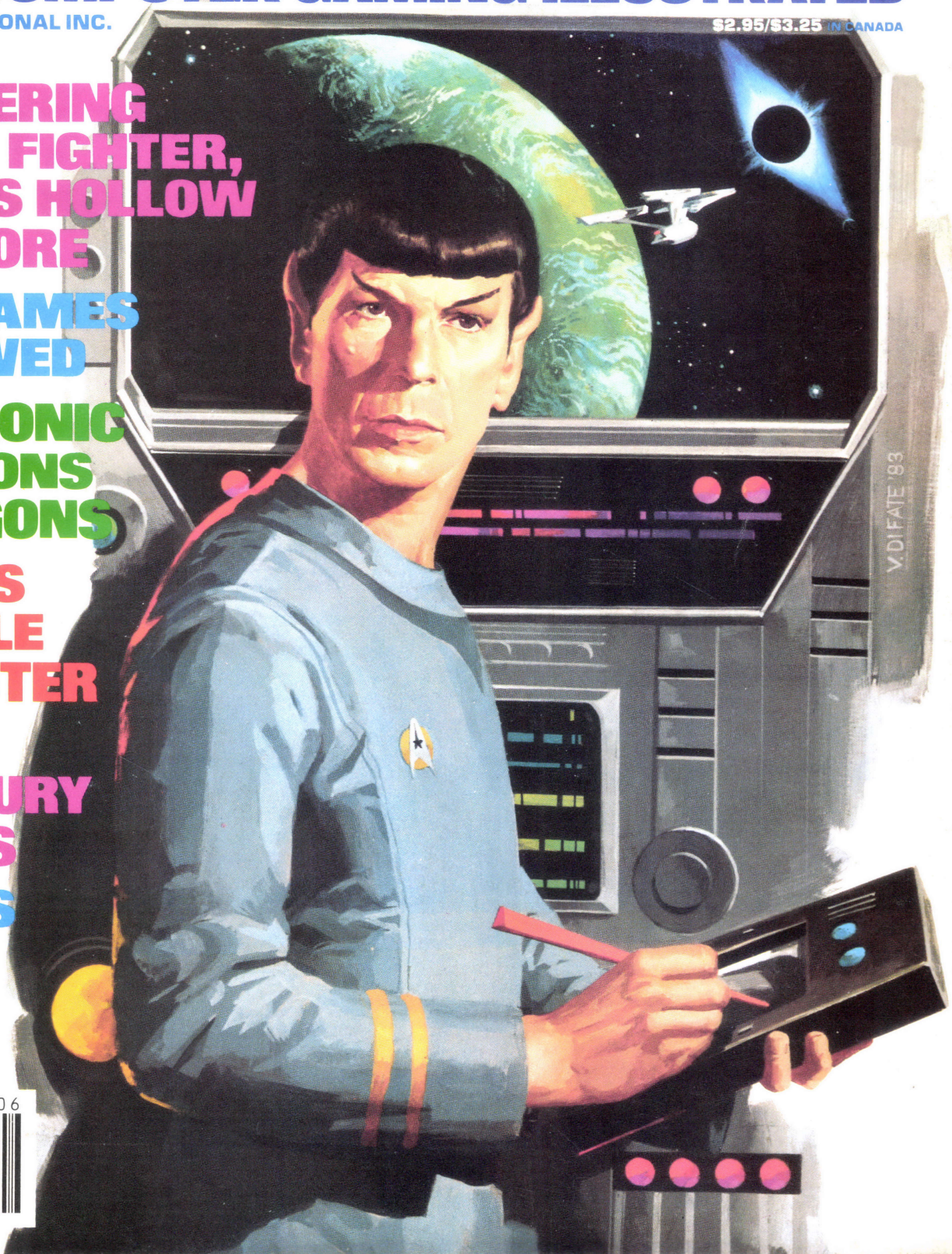

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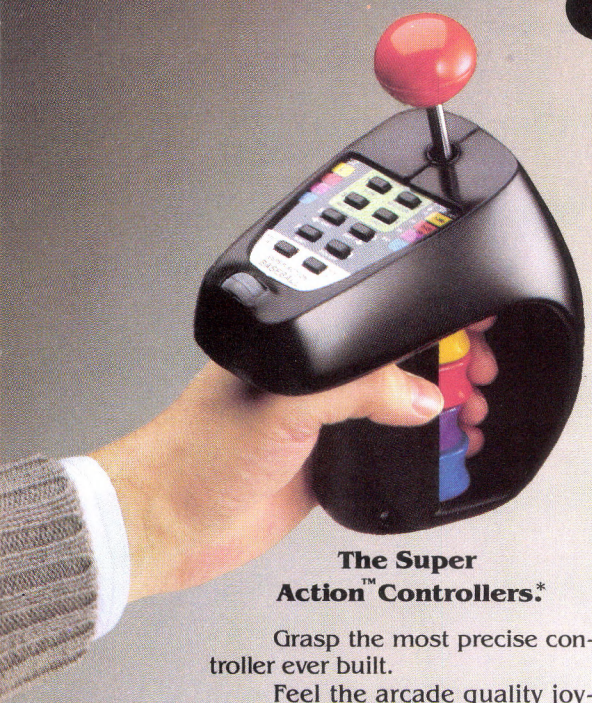

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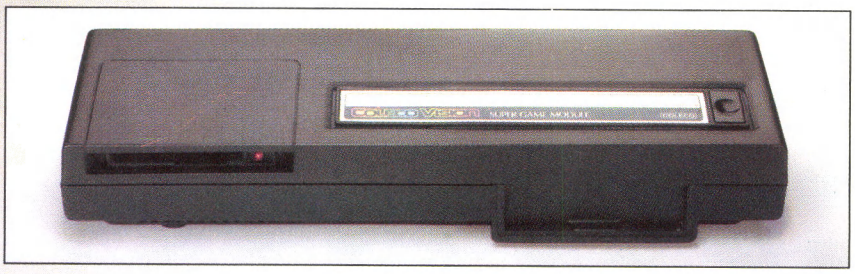

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Boost the memory of your ColecoVision to equal the memory of most coin operated arcade games.

Achieve over 15 times the memory of an Atari 2600® VCS™ cartridge.

Unleash astounding graphic resolution and game variations that surpass even the real arcade.

The Super Game Module can produce over 100 different screens, when required. It displays bonuses. Intermissions. Even lets you enter and store your initials in the "Hall of Fame". The Super Game Module will be available this August.

And it comes with two bonus Super Games: Buck Rogers™ Planet of Zoom™ and Gorf™.

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AME IN TOWN
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The Expansion Module.

Play more games on ColecoVision than on any other system.

Play any cartridge made for the Atari 2600® VCS™ by Atari, Activision,™ Imagic,™ Sears Video Arcade™ and more. The expansion module is available now. So, now choose almost any game made, and play it on the best system ever made. ColecoVision.

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Games like Destruction Derby™ and Super Action Football© coming in June. Rocky,™ SubRoc,™ Mr. Do!™ coming in July. And Time Pilot™ in August.

ColecoVision is the first truly expandable video game/home computer system. And today is just the beginning. Because ColecoVision is the system of tomorrow.

The Roller Controller.*

Quick. Responsive. The Roller Controller is a whole new way to play most joystick controlled ColecoVision games.

It gives you a 360 degree field of movement. Lets you fire up or down. And the faster you spin the ball, the faster your on-screen object reacts.

The Roller Controller is coming this July. And, as a bonus, it comes with Slither,™ the lightning fast arcade game.

ColecoVision™

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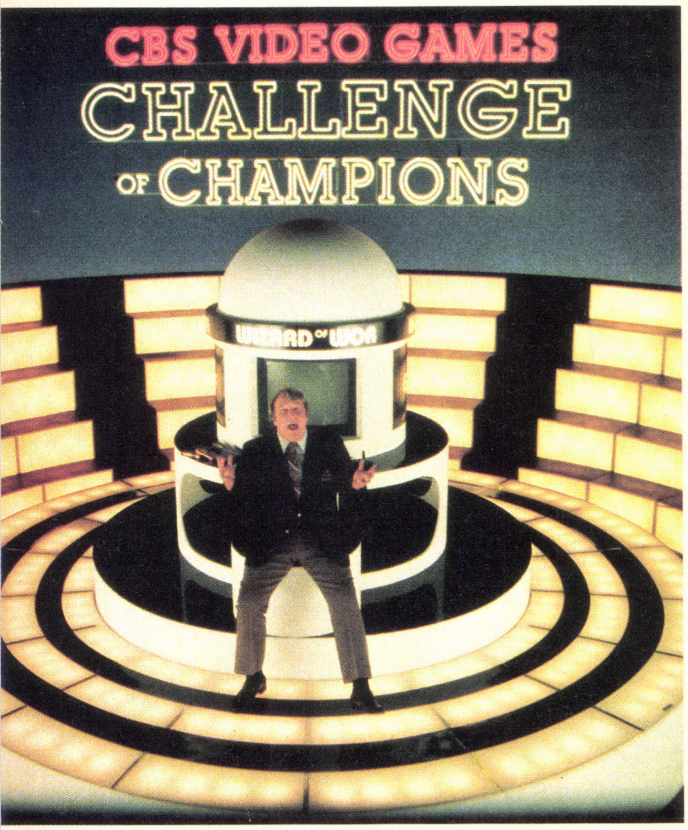
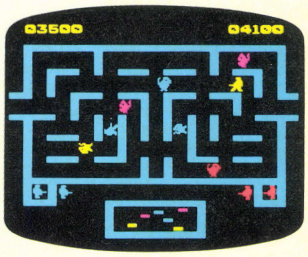
Winning at 'Wizard of Wor' and 'Gorf.' By John Madden.



In our first Challenge of Champions, Ray Johnson of Los Angeles defeated Tony Sarkis of New York and David Hayes, a student at Cal Tech, defeated Brian Anderson, a student at MIT.

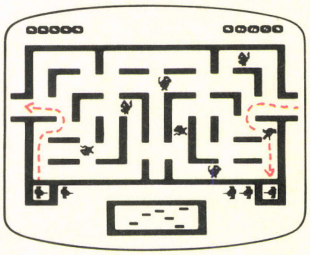
As the sportscaster for CBS Video Games, I get a chance to watch some of the best players in the country in the "Challenge of Champions."

Here's some of their winning strategies.



Wizard of Wor™: You start with three worriors. The object of this game is to defeat the Wizard, his henchmen and your opponent. This is a game you can play alone, or two can play simultaneously. When two play, you have to worry about getting zapped by your opponent as well as the Wizard, and his gang.

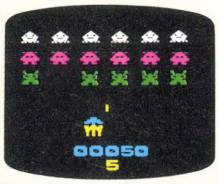
Here's an interesting move you might want to try. Get out into the maze fast, zip out of the escape door, come back in through the opposite side. If you're quick enough, you'll be in perfect position to blitz your opponent's three worriors before they can score any points. The ultimate shutout.



Another variation is to work together. Make a pact not to hit each other (accidents do happen, of course) and go for the record score: 99,500 by Frank Merollo (10/82) and Buz Pryzby (8/82).

'These are two tough games, but I know you're up to the challenge.'

Gorf™ is four boards in one game. Your father will enjoy this game because with a little luck, he'll be able to go through the four boards



Coaching tips: patience

Stick & move

Get position

Hit it high

a couple of times, but after the third level it starts to get faster...and faster. That's when you separate the players from the parents. You start out aggressively and after 10,000 points the bombs and torpedoes start to come hot and heavy, so be prepared to change to a defensive game plan.

The record high score is still 32,700 by Horace Eckerstrom (9/82), which gives you some idea of how hard this game is.

Both Wizard of Wor and Gorf are really tough, but I know you're up to the challenge.

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CBS Video Games

Are you up to the challenge?

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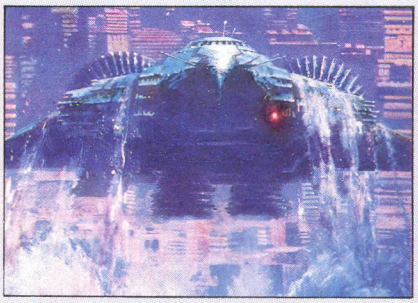

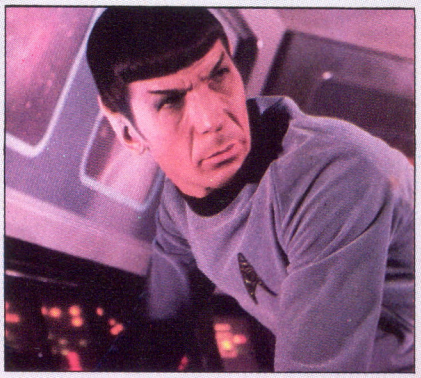

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The Star Trek family, reunited to face **The Wrath of Khan.** *Walter Koenig is, of course, the fourth from the left.*

The Keyboard

Where No Videogame Has Gone Before

a guest editorial by Walter Koenig

The subject of this essay is television: television used for substance and television used substandardly.

It was my privilege to play a featured character in one of the most successful entertainment properties in television history. The character was one Pavel Chekov, the series was *Star Trek,* and it was originally aired on NBC from 1966 to 1969.

I don't mention the show's success to brag and, in any case, whatever boasting I'd do would not be for myself but for the ensemble of which I was a part.

I mention the success of *Star Trek* to make a point about technology, about television — and about videogames.

The secret of *Star Trek's* success as quality programming is really no secret at all. The stories were innovative, they were not morally ambiguous — often addressing the tragedy of warfare and the insanity of prejudice — the characters were dimensional, and there were sound, multilevel relationships between these characters.

The fact that a fictitious character named McCoy could alternately love and hate another totally made-up character named Spock is a tribute to the contribution of the writers, actors, and directors. Their talents merged to achieve a product which was so pleasant an experience overall that viewers wanted to repeat it again and again.

Hence, the success of the series in syndication. Hence, the two motion pictures and, a year from now, a third. Hence the ongoing popularity of novels, comic books, and fan clubs devoted to the show.

In the fourteen years since *Star Trek* ceased production as a TV series, television, as a tool, as a medium, has rarely demanded the audience's personal involvement in quite the same way.

Why?

We are a society compulsively directed toward progress, toward making things bigger and better than they were the instant before. But we never learn that you can't legislate or replace the creative process this way, and that trying to do so actually puts you in direct conflict with your goals. *Space: 1999* cost more and looked a lot flashier than *Star Trek,* but its heart was buried beneath acres of hardware and special effects. The same can be said for series like *Logan's Run* and *Battlestar Galactica.*

Technology can be used to improve the technological environment in which an artist operates, but you cannot use it *per se* to enrich the sensitivity or heighten the intelligence of the audience. That has got to come from drama, from people interacting with people.

There is a lesson in this for videogames.

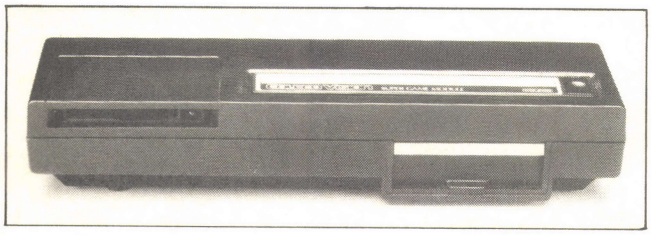
That picture tube which was once reserved for narrative, dramatic presentations is now the domain of *Jungle Hunt* and its ilk. The technological aspects of videogames are cherished and husbanded by their creators with much the same devotion which we applied to *Star Trek.*

However, the programs do not yet have what any entertainment *must* have to endure: personal involvement. To date, videogames gave been mired in the bigger-and-flashier-is-better syndrome. The simple, square figures of *Pong* became the grinding armor of *Tanks* became the lively adversaries of *Space Invaders* became the vivid-hued *Pac-Man* became the 3-D *Subroc* ... and so on.

People inside the industry and out marvel that the average lifespan of a videogame is four months. Personally, I'm surprised it's that long. This is not to disparage videogames or their advocates. Rather, it is to suggest that they are still far, far short of their potential. And that potential, as *Star Trek* continues to prove, lies in drama. If you don't have real, human drama, you have nothing that will cause that piece to endure.

The state-of-videogaming-art is not yet such that computer programs can explore human — or, as we often did on the show, nonhuman — relationships in the same way as a good TV show or motion picture drama. However, they must mature in *other* than technological directions or, like fireworks, each new game will continue to rocket to the sky, shine brightly, than vanish forever.

As an exciting new art and communications form, videogames deserve more.



SUPERNEWS!

To say that Coleco is not standing pat with the **Colecovision** system is to greatly understate the case.

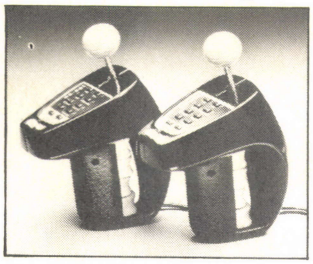
The company recently announced three new products, two of which will certainly have a major impact on the industry.

*The Super Game Module #3, which is attached to the Colecovision control board, adds over one million bits of information to that system, enhancing game play, variations, and graphics.

This module accepts only Coleco's new Super Game Wafers, which are smaller than an audio cassette yet contain thirty-two times the memory of any 2600 cartridge.

The Super Game Module #3 is sold with a *Super Donkey Kong* wafer, and new wafers will be introduced during the year. Titles will have a Super prefix to distinguish them.

*The Super Action Controller is, for the time being, to be used only with Coleco's sports games and any of their games requiring a joystick. More games designed for the Controller will be released during the course of the year. Controllers are sold in sets of two.



New games will be created for the Controllers.

When the player grips the controller, his/her fingers press four control-triggers which, when used individually or in combination, control specific areas of game play. The controller also contains a joystick, a roller that determines speed, select buttons, and a keypad that controls play options.

In Baseball, for example, one of the four control triggers determines the speed of the pitch. The joystick is then used to direct the ball's path — fastball, curve, or slider action — and then the triggers and the joystick are used in concert to control several fielders at once.

*Gemini is Coleco's new videogame system, priced at around $100, that accepts **Atari VCS** and **Sears Video Arcade** games.

To supplement the Gemini, Coleco is introducing Gemini Sound I, which, when attached to the Gemini console, enhances the system with sound using specifically designed and coordinated tapes.

Thus far, the only game designated for the Gemini sound system is one for children, *Berenstain Bears*. During play, the characters offer instructions and comments on the game play.

Atari has hinted that litigation might be taken against Coleco for this second bold intrusion into their 2600 domain. As of this writing, however, no action has been taken.

Atari's My Own Computer attaches to the cartridge slot and contains its own slot for peripherals.

A SILK PURSE?

Speaking of the **Atari VCS,** no less than three companies have introduced hardware that will turn that humble system into a mini-computer.

*My Own Computer. Atari's own 2600 enhancer sells for around $90. It features 8K of RAM, expandable to 32K, and 16K ROM. Using Microsoft BASIC, software programs are being prepared for home management, education, and others in addition to a new library of game cartridges with improved graphics and game play. Other peripherals such as a printer are promised as well.

*The Entex 2000 Piggyback. This system features BASIC 8K ROM and 3K RAM, expandable to 18K RAM, 128 display characters, nine special function keys, four cursor movement, and a series of software cartridges concerning speed reading, spelling, algebra, home finance and more.

*The Compumate 2600. Spectravideo's converter features 16K ROM, 2K RAM, and a forty-two key sensor-touch keyboard. Programs can be stored with any audio cassette recorder. Also, there is a built-in music composer program with two octaves, two channels capability and a visual program with which the user can draw pictures of up to ten colors by manipulating his/her joystick. Now if only it could fly . . .

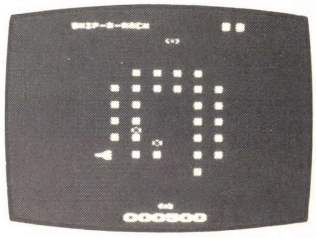
CBS PULLS AN INSIDE JOB

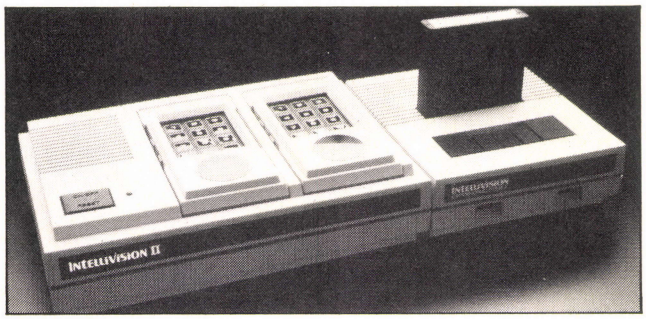
Seems everybody these days is fiddling with the **2600.** CBS Games' approach is different, however: they've developed the RAM PLUS chip for installation in a VCS cartridge that, by itself, triples the capacity of the VCS, improving graphic detail, complexity, and control.

The two new games carrying the chip are *Wings* and *Tunnel Runner,* both point-of-view, perspective games. The former puts the player in the cockpit of a jet fighter, the latter square in the center of a maze with a pursuing monster.

Also new from CBS for the Atari VCS: *Solar Fox.* The player must navigate a force field grid while avoiding fireballs. There are over twenty grids in all, with video and audio clues to identify.

Blueprint is a memory game in which the player must assemble a weapon from blueprints while a maniac harasses him/her. The bomb is the only weapon that will save a young girl from a blob-monster.





NOBODY'S FOOL

Intellivision II, new from Mattel, has all the capabilities of the first unit but is more compact.

A new, optional controller is now available with a joystick and fire button on the controller face and the customary four side action buttons.

An optional accessory for the Intellivision II is the Expansion System A. This module will accept — you guessed it, didn't you? — **2600** cartridges. It can be used with the original Intellivision unit after factory adjustments are made.

Thirteen new cartridges for the **Intellivision** system will be released by Mattel during the course of the year. They include:

Buzz Bombers: hit the honeybees and create a point-garnering honeycomb.

Mission X: a flight game with both day and night missions and an assortment of fighter-enemies and targets.

Burgertime: from the popular arcade game, you erect a big juicy burger while being chased by Messrs. Egg, Pickle and Hotdog.

XIV Winter Olympics: a one or two-player game featuring ski jumping and bobsledding.

Mystic Castle: you are the knight in shining armor, patrolling forests, castles, and dungeons while slaying dragons and endless knights.

Sharp Shot: a children's game that provides moving targets: a pass receiver, a spacecraft, navy ships and monsters.

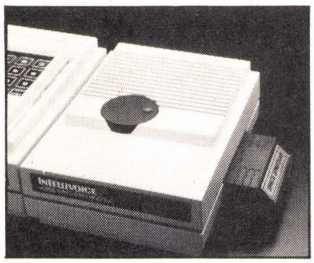
Shark! Shark!: the player controls a fish that grows by eating smaller fish while avoiding the larger fish: crabs, lobsters, and sharks.

Advanced Dungeons and Dragons, Treasure of Tarmin: find the treasure guarded by the evil Minotaur.

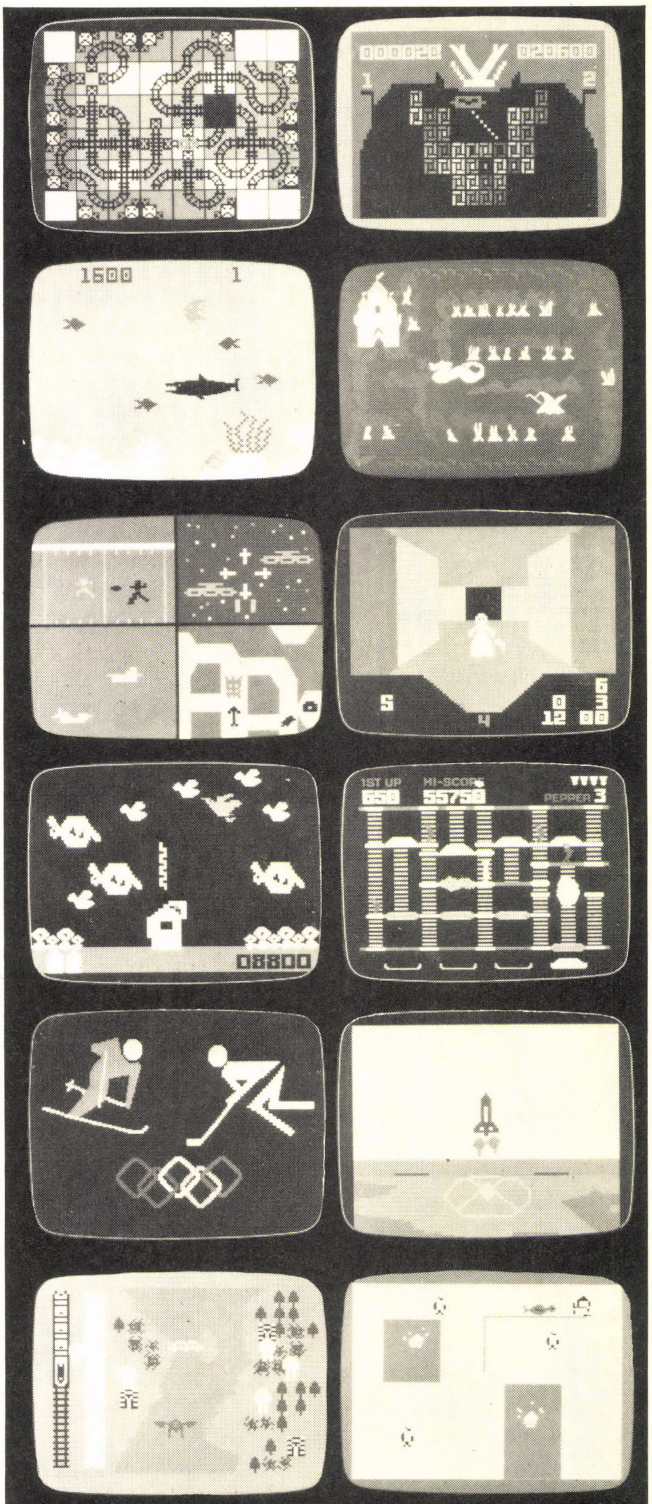
Loco-Motion: you are the engineer of a commuter train, picking up passengers, repairing broken portions of the track, all the while trying to remain on schedule.

Vectron: the player is attempting to build energy bases while defending him/herself from Hungerees, G-spheres, splits, sweeps, and prizums.

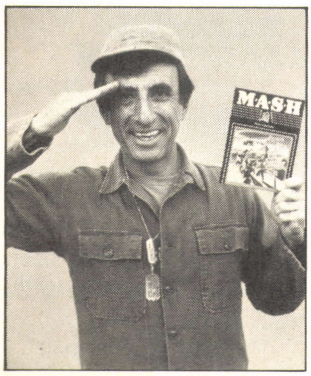
Arctic Squares: you are a penguin fleeing from polar bears, seals, and rival penguins. You must skate around your pursuers so that the ice gives way beneath them and dumps them in the drink.



Mattel has five cartridges available for use with their Intellivoice module.



***Some of Mattel's new games for the Intellivision system include (left to right, top to bottom):* Loco-Motion, Vectron, Shark! Shark!, Mystic Castle, Sharp Shot, Advanced Dungeons & Dragons: Treasure of Tarmin, Buzz Bombers, Burgertime, XIV Winter Olympics, Space Shuttle *(an Intellivoice cartridge),* Mission X, *and* Arctic Squares.**



PLAYING KETCHUP

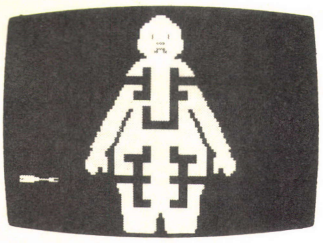
While Intellivision evolves original titles for its games, 20th Century Fox Games of the Century relies on high recognition to attract players.

Two new titles from Fox Games for the **Atari VCS, Colecovision, Intellivision** and selected computers are:

*M*A*S*H*:* the wounded are being flown in by chopper and wisecracking players must get them to the operating room and deal with their wounds. Eight variations.

Fall Guy: the player is a stunt man climbing the side of a building during the making of a monster movie. Monsters throw him off the building or hurl bricks at him as a sadistic director calls for take after take.

And here is one game for the **VCS** that should have been a movie: *Revenge of the Beefsteak Tomatoes:* tomatoes are going berserk, uprooting themselves and splattering innocent folk with juice and bombs. The player must build brick walls to contain the tomatoes' fury.



SLICED TOMATOES

As reported in our Eye On Arcades column, laserdisk technology is on the horizon for the game market. This will allow the player to watch a sequence converted from film which will offer him/her an option, and when the option is decided, the consequences will be displayed.

Wizard Video, makers of the *Texas Chainsaw Massacre* and *Halloween* games for the VCS, are interested in adapting those films to a laserdisk-style game.

Wizard has the cooperation of producer Charles Band, who owns the rights to the films. New, matching options and results not seen in the original movies would have to be filmed.

In the VCS *Halloween* game, the player limns the role of a victim fleeing the masked maniac. In *Chainsaw,* the player is the masked maniac pursuing frantic victims.

Wizard spokesman Larry Hoffman had this to say of the games: "They are a wholesome way of taking out aggressions. They let your anger flow through the TV set rather than through your family or neighbors. The approach is tongue-in-cheek. The figures are not realistic."

A GADGET AND A GLOVE

A player could wear a joystick out pretty fast, fleeing a murderous maniac.

Atari is now making available a Joystick Repair Kit. The kit sells for $4.50 and has all the necessary parts and instructions.

Attention, southpaws! The kit will help you convert a joystick to your left-handed needs. Instructions for the conversion were printed in the last *Atari Age* magazine. No new parts are required.

And for those of you who collect blisters from intense joystick play, Nancy & Company of Hayward, California have the answer: the Videomax videogame glove. The glove is made of nylon, with leather reinforcement in the palm, thumb, and second finger. The remaining fingers are exposed. The glove comes in a choice of three sizes, three colors, for $6.95.

Another new accessory to reduce player wear and tear is the Thumb Saver, to be used only on the **Intellivision** control unit.

The Thumb Saver can be applied without disassembling the control unit. It is designed mainly to elevate the control disc and thus to enhance player control, but it also cushions the surface, and, if a little talc is applied, can smoothen it.

GOOD BUY, MY LOVE

Starpath Corporation has announced that it is reducing the suggested retail price of its Supercharger from $69.95 to $49.95.

The Supercharger (the system and some of the games are reviewed in this issue's Preview section) is inserted into the cartridge slot of the **Atari VCS** or the **Sears Video Arcade.** A cable from the unit is then plugged into the earphone jack of any audio cassette player, which programs the game into the television.

The Supercharger expands the RAM capacity of the VCS fifty-fold, according to the company, from 128 to 6,272 bytes. This enhances the complexity and length of their games.

The games, on audio cassettes, sell for an average price of fifteen to eighteen dollars. There are seven Starpath games thus far, the most recent being *Killer Satellites* and one of the first being the attractively titled *Communist Mutants from Space* (the mothership in that game drops "irradiated vodka" on the hapless player).

The company is also planning to adapt their games to the **Atari 400, 800,** and **1200** home computers for release early this year.

READY OR NOT

Here are some of the games that players of all ages will be seeing in their arcades in the coming weeks:

Time Pilot, by Centuri. You are a time-traveling pilot of a jet, taking on ever-accelerating enemies from 1910 to the far future. Challenges progress from biplanes to monoplanes to helicopters to supersonic jets to U.F.O.'s.

Sinistar, by Williams. You are the pilot of a deep-space mining ship, gathering crystals which power your missiles and propel your vessel. You are competing for the crystals with a swarm of worker ships, which will steal the crystals you have gathered and blast you. The workers are constructing the Sinistar (much like *Star Wars'* Deathstar), an invincible space station. If the workers finish construction before you are fully powered ... you're out another quarter.

Beezer, from Intrepid. This is a conversion kit for arcade owners which will modify *Galaxian* games into this new game. Using a trackball, the player maneuvers through a honeycomb, opening gates to trap pursuant bees inside while avoiding being stung or trapped. The player, as Beezer, eats bee eggs before they hatch, which gives him/her the power to eat the bees themselves.

Xevious by Atari. The player is the pilot of the Solvalou, a formidable, futuristic aircraft. At the player's disposal is an eight-position joystick, a Zapper button to destroy airborne targets and a Blaster button for ground targets.

The player cruises over forests, oceans, deserts, rivers, and landing strips, battling foes such as the Toroid patrol fleet, Torkan scout ships, and the Zoshi death squad while trying to destroy enemy installations on the ground.

Other challenges include a flotilla of Bacula resistor shields — mirrored disks that repel the player's shots but cannot be destroyed; the Machu Pichu landing strip of the gods, a particularly well-defended enemy fortress; and the Andor Genesis Mother Ship, which can only be disabled by a direct hit.

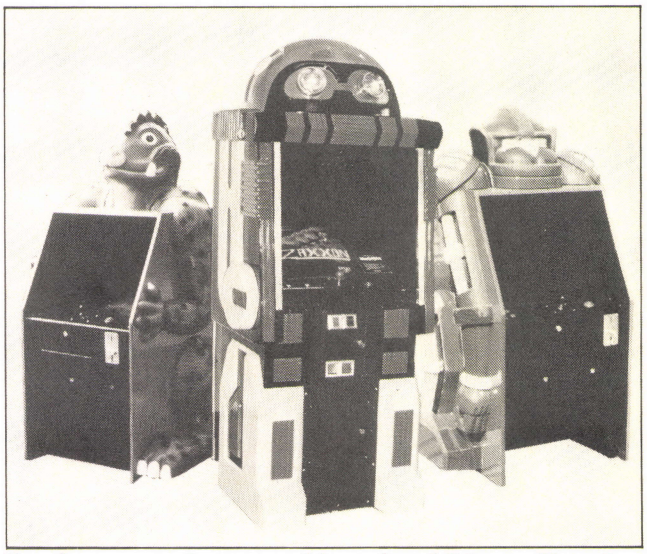
Bump 'N' Jump from Data East. A roadway game with a difference: the player has the option of either avoiding the other cars or bumping certain ones off the road into sidewalls.

In addition to the eight-way joystick, the player controls a jump button, which allows him/her to leap over rocks, oil spills, road barriers ... even over rivers, lakes, and other cars.

There is also a dip-switch which allows the player to increase the difficulty of the game, and a continuous play feature: if the player adds another coin within ten seconds of a completed game, he/she continues where the last game ended, although with zero points.

Says Bob Lloyd of Data East, "There are no patterns to the game and the game play is continually unique. There hasn't been a game like it on the market."

You've got ten seconds, kids. Keep those quarters coming!



Sega's new arcade game cabinets for children will probably feel most at home, not in arcades, but in restaurants and similar facilities sponsoring games.

KEEP IT SHORT

To keep quarters coming in from all quarters, Sega is bringing Kid Power to the arcades.

Sega is introducing new arcade game cabinets designed to appeal to young children visually as well as staturally. The cabinets are sculpted in the character of either a Godzilla-type monster, a robot, or a monkeyrob and stand a mere fifty-eight inches high in all.

Which will put the screen ... and the coin slot ... right where younger children want them.

PIGSKIN AND LEATHERFACE

With electronic maps and sophisticated mysteries currently in development or release, laserdisk technology bears very close scrutiny. Much maligned and ignored by the video industry, laserdisk may very well have the last laugh.

The National Football League and Advanced Video have announced a joint plan to produce a unique football arcade game utilizing laserdisk technology. The project is in development now and will be released in the fall.

The player will select a play from a number of strategic categories and then watch the results — taken directly from NFL films — from one of over two hundred options. The player can pit his coaching skills against another player or against the computer.

The first game to be released will contain films of a game between the Los Angeles Raiders and the San Diego Chargers. More games and team pairings will be released later.

Laserdisk technology figures in the plans of a number of companies, including Wizard Video, makers of the *Halloween* and *Texas Chainsaw Massacre* home videogames (see our Eye On Videogames column in this issue).

However, it is doubtful that beleaguered arcade owners, already charged in by some parties with sponsoring unwholesome entertainment, will welcome games on film that feature graphic, remorseless slaughter.

A games expert never plays into his opponent's hands ... does he?

Continued on page 75

RAY BRADBURY

A Videogaming Illustrated Profile of the Poetic Master of Science Fiction.

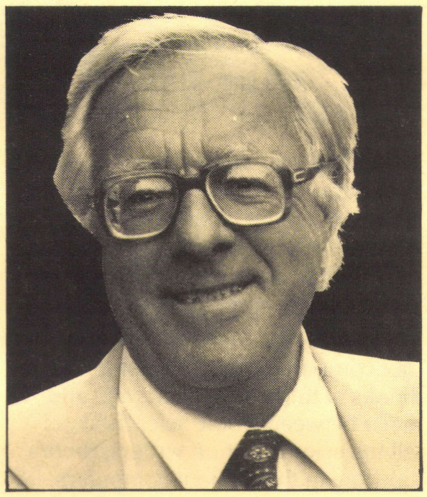
As a science fiction enthusiast, Ray Bradbury helped create the genre's fan following with his outspoken devotion to the literary art. As a writer, he elevated that art by creating some of the most evocative, memorable, and humanistic examples of the craft. Some of his science fiction classics include *The Martian Chronicles* (1950), *The Illustrated Man* (1951), and *Fahrenheit 451* (1951). As a poet, he has created striking but accessible verse on a variety of unusual subjects — one of them being the joy of computers.

It is a pleasure to present this exclusive interview with an author who continues to be a strong, positive force in the entertainment field; one whose past, present and future work will continue to grace the TV screen, the movie theaters, the stage, and the book stores, but not, he vows, the videogame arcades. We are sure that you will find his opinions on that subject, and such other wide ranging topics as cartoons, women's lib, the Japanese, and George Plimpton concise, thought-provoking, funny, and even relevant to the videogame world.

VI: Recently readers have been treated to your poems on the subject of computers, isn't that so?

RB: I've done several, starting eight or nine years ago. When they first started appearing, I made tours of various companies. I went through IBM and several places locally and looked at all the new machines. The usual thing that happened was that the man who invented it or the man who had worked on it would stand there and say, 'Isn't it wonderful?' I'd say, 'No, you are. I don't admire the machine. I admire you.' I pay attention to the correct object.

VI: So you don't number yourself



among the many who fear computers?

RB: The old cliche has always bugged me: 'Aren't you afraid of computers?' I say, 'Hell, no. Why should I be afraid of computers?' If you're going to be afraid, be afraid of the direct object: man. It's how things are used. A car is as good as its driver. Look at the driver, don't look at the car.

VI: You obviously have a healthy attitude toward all the new technologies.

RB: When you look at any machine, it is the sum total of all the men who've put their minds and guts into it. You're looking at men. You're not looking at a device, you're looking at a history of ideas. Any machine is automatically a metaphor for the history of mankind and all the dreamers. You're not looking at a machine at all. You're looking at a book. The trouble with the computer is that it doesn't look like a book. Yet it is. It stores information just as a book does. It uses different methods and it has different covers, but the end result is the same. You either take information out of it or you don't. And the information you take out is either of a high quality or a low one. It depends upon the author.

VI: I think it's safe to say you don't fear computers.

RB: I say to people who ask me are you afraid of computers, 'Are you afraid of libraries?' I mean, when you walk past a library, do you tremble? There are times when you should, because who is in that library? Julius Caesar, Genghis Khan, Adolf Hitler, Stalin, Lyndon Baines Johnson. Who are *you* afraid of? They are all terrible people in their own way. But you don't burn books, do you? You've learned not to burn books, I hope. So why should anyone 'burn' computers?

VI: Continuing the comparison between books and computers, many writers are using computers as word processors. Do you use a computer?

RB: No. I'm not a researcher and I don't write voluminous novels. People who write long novels or do research really need them. But when you write short stories, everything is over in an hour. I mean, it's like instant sex. If I can't do things quickly, I don't want to do them. I get up in the morning, I write a short story in an hour and a half. Generally two or three days later I revise it, but I don't need a computer for that. My IBM Selectric is plenty good for the minor corrections. And if I have to cut a paragraph, so what? That isn't so much work.

VI: Would a word processor be of any use to poets?

RB: No, I don't think so. Well, wait a minute. I suppose ... heck, poems are so short. I mean, what have you got to do with your day except type? I write poetry all the time and generally I do it in five minutes. Then I put it away for a couple of days or a couple of months. Then I go look at it, run it through the typewriter, maybe play some more, but you can do it almost as quickly that way as on a computer.

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I usually only change a word, a line, maybe three words in a whole poem. It either comes right the first time or it doesn't come right. For me. For other people, I suppose, who are just full of mistakes, maybe. Maybe a younger person who is still learning might need a word processor. But when you get to my age ... I've been writing fifty years now and I've gotten awfully good at intuitive creative writing and typing. I've been typing since I was thirteen.

VI: Today, it seems as if the cliched question, 'Are you afraid of computers?' has been replaced with 'Are you afraid of videogames?'. How do you respond to that?

RB: Oh, fiddle! We live in a society that is 'panic prone.' Everytime something new happens — you name it. Open the newspapers any day in the last twenty years. Let's say, they start talking about, oh, experimenting with DNA. Well, as soon as that's announced, wow! Panic all across the country. You'd think the Johnstown flood had just hit all fifty states. Listening to them, you'd think they're going to start making the Hunchback of Notre Dame a thousand times over, right? It's always the negative, it's not the positive aspects. It's always, 'oh my god, head for the hills.' And they're always wrong, because nobody has any information.

VI: That seems to be what happened with videogames, all right.

RB: How can they make a judgement when no research has been done? There's been no experiments. You immediately have books being written by people who don't know a damn thing about what they're writing about. Even the scientists don't know. Because you can't predict the future, can you? It's very hard at the outset. For instance, computers were never predicted by anyone. Robots were, but not computers. You go through all the books of thirty, forty years ago and even between all the scientists and all the science fiction writers, there's nothing in there about computers. It's a complete blank. We just didn't guess that a day would come when we'd have these devices. We predicted a lot of things, but not that. We predicted we'd go to the moon, but we didn't predict we'd take computers with us. They're not on board.

VI: How does this relate to videogames?

RB: It just goes to show you how all the experts are generally wrong on any one of these things. They're wrong on computers and they're wrong on videogames. After all, we had videogames in 1935. They were called pinball machines. And they were supposed to turn boys' minds to mush, correct? Look: you go in with a mushy brain and you'll come out with one. Before pinball, it was pool. 'Don't hang around the pool hall, kiddie, or your brain will turn to slime.' It was always something. The history of the world has always been men and boys playing dumb games while the women put up with it. Then it was pool and pinball. Today, it's videogames. If you've got a good brain, you can go in and come out with a good brain. The machine is not going to effect that one way or another.

VI: So you played pinball, huh?

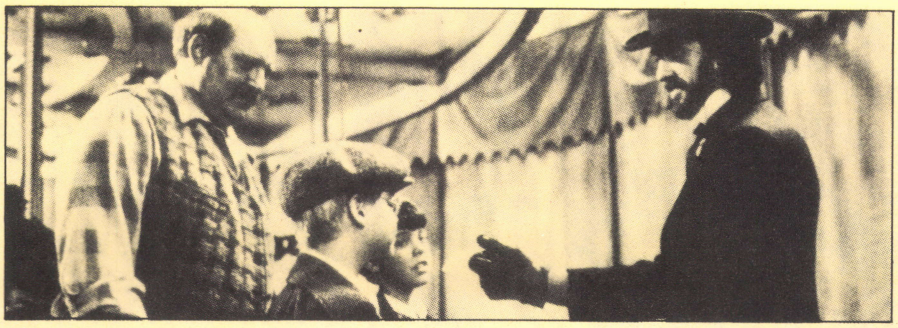
RB: Sure. We all did ... when we had a nickel. We just didn't have many nickels in those days.

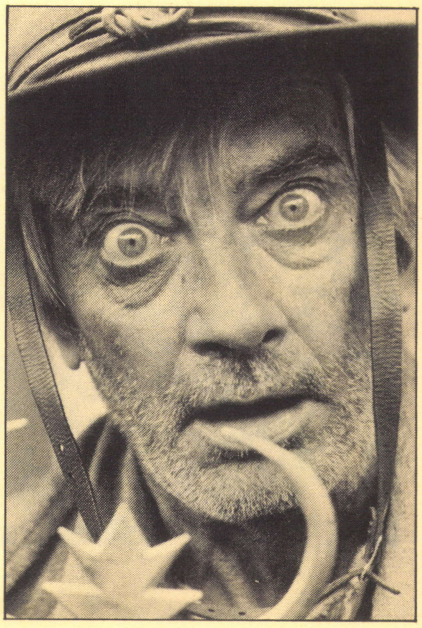
VI: Do you go into any arcades today?

RB: I've been around on occasion, but you feel out of place because it's mostly teenage boys. You know, I was thinking about this yesterday. Just how many of these activities are male-oriented. Even if they are available to females, they wouldn't participate. Because girls are not toy/game oriented and they never will be. They are much more practical. The history of the world is foolish toys invented by foolish men who then play with them. Then a lot of these toys grow up and become war games.

VI: There is an old saying — 'The difference between a man and a boy is the price of his toys.'

RB: Yeah. I was thinking. This would be an interesting experiment for someone who had the money. If you put together two different arcades with one saying 'Men and Boys Only,' and the other saying 'Women and Girls Only.' The male one would make a mint and go on forever. The female one would close down within a month. The women wouldn't go in. Why? Because the men aren't there. Boys and men go in to play the games, they don't care who else is there. If the girls come in, fine, it's just that they don't need the machines. Let's put it this way, they don't go in to get together with other girls. They play the games because the boys play them. That's my





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theory, but I think it can be proved out.

VI: While some parents are at the arcades with their children, many more are at home with their Atari, Intellivision, and Colecovision home videogame units. Do you have one of these things?

RB: I've seen them advertised, of course, but I don't have one and I haven't been in a home that does. They're like any toy. It'll go through its phase. But they'll all be bought by men or for men. I enjoy games, but I write all day long so by the time I come home, I'm full up with words. Generally at night, if we do anything, we watch lousy TV. If you've been thinking and creating all day, who needs to be brilliant all evening? For all those people who make fun of television: come on! It's there for all of us, and there's always something good on if you look for it.

VI: Home videogames would only junk up the picture then?

RB: I welcome the chance to be junky. I've been a great collector of comic strips all of my life and all my early influences were dreadful ones, like Buck Rogers, Flash Gordon and Prince Valiant. Our whole lives, really, consist of combinations of bright, excellent things and junky things. All of it is creative experience. If you really look at Shakespeare's stories, it's pretty tawdry stuff. It's what you do with it. He happened to be an excellent writer. Look at much of my work. They are adventure stories. I believe in entertaining people. And if I do them some good along the way, swell. So when I watch TV at night, I enjoy it.

VI: Did you have a favorite pinball machine, back in the days you played?

RB: I wasn't all that pinball oriented when I was fifteen. I played an occasional game of pool, and the occasional pinball machine, but I was never so good that I felt encouraged. They had a few science fiction pinball machines that began to show up. But really, that was later. Nowadays, science fiction themes abound in arcades.

VI: Given the volume of your work and the volume of videogames, have you been approached by machine manufacturers?

RB: Yeah. A couple of times, but I've turned them down. I don't want to turn into George Plimpton. What a bore he is. I can't stand him! You may quote me. You may quote me directly. Please, make it the title of the article, 'I Don't Want To Be George Plimpton.'

VI: Oh, my stars! Do you two know each other?

RB: No, but I'm so tired of seeing his face every night. He doesn't realize what he's doing to himself, you know. He's an unwelcome commodity by allowing himself to be on eight or nine times a day for the last two years. You can't do that to people.

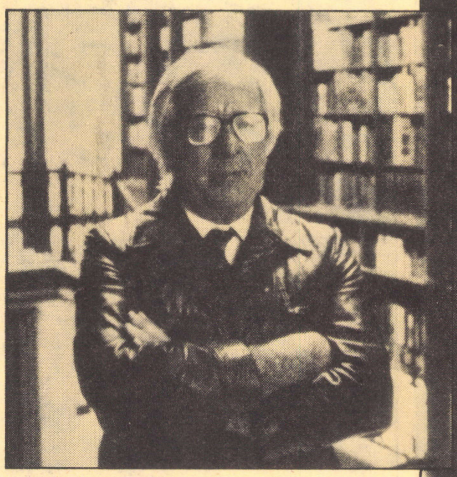
(Editor's note: George Plimpton declined to comment on Mr. Bradbury's remarks.)

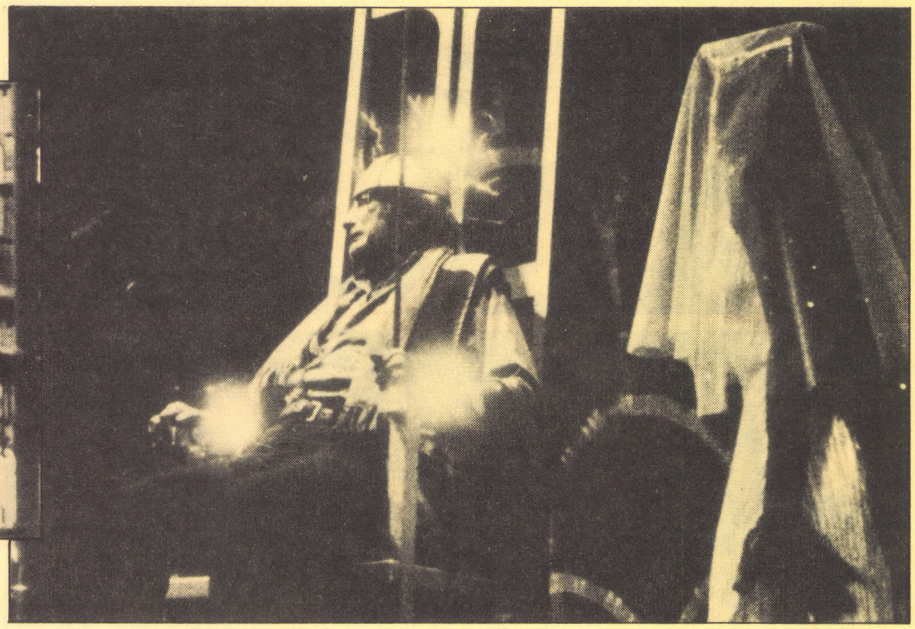
VI: Have designers asked you about adapting your stories to a game?

RB: Someone from Mattel called me a couple of months ago and then someone from Atari sent me some material and then one other company. I looked it all over, but I was leery of turning into a commercial product. I think you should just write your stories and publish them. I love working on film and TV on occasion. But you must be very careful not to turn into that sort of commodity where people say 'Oh, God, here's one more sell-out."

VI: You have avoided that danger while still producing volumes of beautiful work. However, your new work can be seen more readily on the movie screen than on the book shelves. Walt Disney Productions has just added computer generated effects to their movie adaptation of your Something Wicked This Way Comes. *Have you seen the film?*

RB: Oh, sure. I'm out there all the time and have been for the last year and a half. They've been reshooting some scenes recently and the computer people have been adding some stuff to a library scene where Mr. Dark confronts Charles Hollaway, who is the hero. Mr. Dark rips pages out of an old, historical book to prove his points; it was originally shot without any special effects. It was a wonderful scene then but now they've added illumination to each page as it's torn out. It looks as if the page is going to catch fire any moment, but it doesn't. It just sort of glows when this evil man touches it. It's beautiful, just incredible. When I heard about it, I thought they can't do it, and if they do it, it won't be right. But I had to take that back. I saw the effects the other day and if what they add to the rest of the film is that effective, I'll be very happy.





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VI: Did you write the script?
RB: Yes, and it's mostly intact, so far. I had a fight with them though. You have to fight with every studio, Disney included, to keep things the way they should be. I've seen the whole film, but now we may have to go back and shoot some scenes that were missing. The studio, in their infinite wisdom, took out certain scenes a year ago. Then, when we screened the thing for ourselves last May, the studio suddenly said, 'Gee, something's missing.' I said, 'It's missing, all right! I told you a year ago it was missing when you took it out.' So they said, 'Well, we'd better spend an additional three million dollars to put that back in.' I said, 'Yes, you should.' But I've got to give them credit; they spent the money and they've created the missing scenes. But they could've done it for half the price when the film was in production a year ago.
VI: And now it's set to be a summer 1983 release from Walt Disney Productions.
RB: It doesn't matter when you come out. All this talk of summer, Christmas, that sort of thing, is nonsense. A good film is a good film. You could bring out a film the day the kids go back to school at the end of the summer. If your film's any good, you'll still make a mint. Because people have got to go to the movies.
VI: There was a lot of fear in fantasy fandom that your film would turn out like TRON.
RB: There was nothing wrong with TRON that a good script couldn't fix. It was a beautiful thing to look at. The only problem was that you'd wake up and say 'Who are these people?'
VI: Even though you may have had some difficulties at the Disney Studio, you've always spoken very fondly of Walt Disney films.
RB: I was a member of the Mickey Mouse Club when I was twelve. People forget they started in theaters in 1932. I have my old Mickey Mouse button, of course. I knew Walt when he was alive and I always wanted to work there. And I'd love to do a feature length cartoon there sometime.
VI: You would certainly seem a natural for their new cartoon production The Black Cauldron. *Is there any talk of that?*
RB: No, but I am working on an animated feature now for Gary Kurtz, the producer of *Star Wars* and *The Dark Crystal.* In this case, I'm doing *Little Nemo in Slumberland,* based on the comic strip and cartoons of Winsor McCay. I've always admired that cartoon. It came out in 1905, but I saw reproductions of it when I was a kid. And, of course, Winsor McCay was the first animator ... he did *Gertie the Dinosaur.* That influenced Walt Disney to become an animator when he was a young man. I'm working with a combination American and Japanese crew.

It'll be partially animated here and partially animated in Japan on a budget of twenty million. It'll be full animation. They're bringing in animators from Canada and England. I'm having a ball working with these people. Every day when I show up there are eight or ten new illustrations depicting what I talked about the day before. So you get instant gratification of your esthetic senses. I think it's going to be a lovely film I'm having a grand time.
VI: The Japanese seem to have latched onto the concept of 'The American Dream' and ran with it.
RB: Yes. For example, I'm also doing a thirty minute film with Saul Bass which is going to go into a Japanese temple east of Tokyo. It's a forty million dollar temple in which they have built a planetarium. And into the Planetarium will go our film. Leave it to the Japanese to place a planetarium in a religious temple. Why didn't the Vatican think of this fifty years ago? Why didn't some synagogue think of it ten years ago? So here we are again, with the Japanese getting the jump on us with brilliant thinking.
VI: What will the film be about?
RB: It's a gigantic cinematic metaphor for existence: paying attention by utilizing the five senses. It will be about all life. In other words, to quote from an old poem, 'What is this life/if full of care/we have not time/to stand and stare.' That's the essence of it. But that doesn't begin to tell you, really. We've been shooting it for a year. Saul Bass is one of those craftsmen who will take a full year with a small crew. He doesn't believe in a big production. That way, a million dollars will buy you five million dollars worth of effects.
VI: Your works have been adapted to both movies and television. There were film versions of The Illustrated Man *and* Fahrenheit 451 *as well as TV versions of* The Martian Chronicles

Continued on page 53

fiction

ENDGAME

by Stuart H. Stock

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Wallace knew the car was gaining on him. He risked a precious second to check the rearview screen — at this speed, taking his eyes off the track for too long could lead to a crash-out. The sleek lines of number 27 were almost a blur as the other car narrowed the gap between them.

Wallace smiled then. He had no intention of losing the race.

There was only one lap to go, and it was down to a contest between Wallace and the driver of number 27. The other cars in the race had crashed out long ago. Wallace heard the bellow of the engines and the squeal of tires as both cars rounded the last curve. He felt the tension in his hunched body, the film of perspiration across his forehead. His hands ached from gripping the controls.

Number 27 was nearly abreast of him and coming up fast. Wallace waited till he was in just the right position — then swung his car viciously to the left.

The driver of 27 reacted too slowly. He tried to swerve, but Wallace's left rear fender slammed into his opponent's side, sending the car into a spinout. Number 27 smashed through the guardrail, plowed into the bank, and burst into flames.

Wallace laughed aloud. He was nearly home free. He dropped his speed — it was still possible to lose the race by crashing out over the finish line. But Wallace knew what he was doing. He took the car easily over the finish line and coasted to a stop.

"Bravo," Peterson said.

Wallace sat back in his armchair. In front of him, the thirty-inch TV screen bore an aerial view of the racetrack. At the top of the screen his elapsed time, total mileage, and top speed were displayed.

Every four seconds, the upper left corner of the picture dissolved to reveal a section of track where one of his opponents had crashed out. This same corner had served as rearview screen during the race.

Wallace absorbed the electronically reproduced cheers of the crowd booming out of the TV speaker. He reached over and flicked the switch on the videogame console. Sound and picture vanished. Reluctantly, he switched off the television.

"You've really become quite good," Peterson said.

"Oh, that was only a level two race," Wallace answered. "I'm not even close to handling a level three competition." Still, he was pleased by the compliment.

Peterson was the salesman ("Company Representative" was actually the term *he* preferred) from Xtronics — the company which made Wallace's vidgame. The Xtronics line of Vidgame products was so sophisticated and expensive that the company only rented the equipment to customers, and conducted business only in the customer's home.

Peterson's territory covered the expensive condominium the Wallace's lived in, as well as a broad swath of the surrounding area. He saw plenty of customers each week, and if Peterson said he was good, Wallace knew he could trust the salesman's judgment.

At that moment, Libby Wallace came in with coffee. She set her tray on the serving table and poured. She already knew how Peterson liked his since he was a frequent visitor in the Wallace home.

The Wallace's apartment was spacious and carefully ar-

ranged. The living room was done in varying shades of off-white, and not even the recreation wall, housing the stereo, TV, and vidgame, interrupted the ordered elegance of the room. The Wallaces had paid enough to ensure it did not.

"You still make the best coffee of all my customers, Mrs. Wallace," Peterson said, setting his cup on the coffee table. "So tell me — any problems with the game?"

"Only that I can't get Jack away from it!" Libby said jokingly. "He plays that car race game *every* day."

"Oh, I'm not that bad," Wallace answered. Actually, there were times when he thought he played the game too much. But it was just about the only recreation he got.

As Third Vice-President of Landholder's Insurance, the pressures on him were enormous. The vidgame allowed him to discharge all the violent frustrations that built up in him day after day. He always felt better after playing a vidgame, and especially *Race!*

"And what about you," Wallace said to his wife. "You spend half your life playing *Targets!*" There was no rancor in his voice.

Libby Wallace blushed. "Well, I do enjoy it," she said. "I get such a kick out of seeing things blow up!"

Peterson laughed. "You folks aren't any different from my other customers. They all play the game a lot when they first get it — then they start to lose interest. That's why we keep introducing new games — and I've got one here I think will interest both of you."

Uh oh, Wallace thought. *Here comes the sales pitch.*

"You both know vidgames have been around since the 1970's," Peterson began. "They originally used a video display to simulate a game by means of a programmed cartridge. As micro-electronics advanced, the games became more complex. And with the advent of the home computer, you could simulate any game on a TV screen that you could play in real life."

"But not everyone needed or wanted a computer in their home," Wallace put in.

"That's right," Peterson said, without missing a beat. "After the first big rush, the home computer and vidgame industries fell into a slump. Simulating a game on TV lost its appeal — and that's where Xtronics came in."

Wallace pretended to listen, but he'd heard it all before. Peterson insisted on giving the whole speech every time he sold them a new cartridge.

High technology, coupled with an increasingly inflated economy, allowed Xtronics to introduce "Live-Simulation." Instead of simulating a car race, Xtronics arranged with auto-makers to produce hundreds of cheap cars outfitted with advanced micro-electronic remote controls and mini-TV cameras.

When you plugged your *Race!* cartridge into the game console at the scheduled time, it sent a signal through a local dish antenna to an orbiting satellite, relaying it to Argus, the Xtronics master computer — which in turn, picked a car for you and checked to see who else was available to play. If there was no one, the computer selected a car and played against you itself.

The same arrangement was used for other Xtronics game cartridges, like *Tank War, Speedboat Attack,* and *Dogfight.* In *Targets!,* the game Libby Wallace liked so much, you used a pair of remote-controlled machine guns to destroy a variety of targets launched by the computer.

The beauty of it was that you weren't just playing a game — you were participating in a real event. You drove down a real track, blew up real tanks, shot down real planes. You heard and saw the real explosions.

And it was good for the nation's economy. It helped the auto, defense, electronics, and synfuels industries, as well as dozens of others down the line. Wallace had heard the government approved of the Xtronics vidgame — and even subsidized some parts of it.

Of course, the game was expensive. Peterson had told him that only a few hundred thousand people in the country could afford the annual $10,000 rental. Then there was the cost of the cartridges and the small five dollar per game fee. But Wallace thought it was worth every cent, and the high price kept the games in the hands of those best able to appreciate them.

"Of course, we've always had the problem of not being able to play at any time," Peterson was saying, "simply because we couldn't keep up with a constant demand for cars, tanks, planes, and the like. But we think we've finally licked that problem."

Peterson removed a vidgame cartridge from his briefcase and handed it to Wallace. It looked like all the other cartridges he'd bought from Xtronics: a flat, gray metallic rectangle slightly larger than a deck of cards. On one side a series of raised letters spelled out the word *Control.*

Wallace looked up at Peterson, intrigued by the name.

"You know that even with the improvement in our economy, unemployment is still a massive problem," Peterson said. "What we've done is recruit people who are out of work. These people have voluntarily allowed themselves to be neurologically implanted with electronic devices which are hooked through *Argus* to a special keyboard controller that attaches to your vidgame console.

"In effect, these people become surrogates for the game player. *You* control their every move. So any activity in which a human can participate is now available for the vidgame player also."

"Wait a minute," Wallace said. "You mean with *Control* I can see what somebody else does, hear what they hear, share all their experiences?"

"Well, you can't smell, touch, or taste what they do, but we're working on it. Otherwise, you're essentially right."

"My goodness," said Libby. "It sounds wonderful. But what about the people with these ... implants? I mean, how do they feel about it?"

"I assure you it's all quite legal, Mrs. Wallace. The government knows about *Control,* and anyone taking a job with us knows what they're getting into. They sign complete waivers of liability. Believe me, we have more applicants than we can use."

Wallace found the idea enthralling. "What kind of games are available?" he asked.

"Well, there are several 'skill' cartridges such as *Ballet, Modern Dance,* and *Gymnastics.* And there's all kinds of individual sports, like *Golf, Bowling, Skiing,* and *Tennis.*"

"What about team sports, like baseball and football?"

"Too complicated right now, I'm afraid," Peterson said. "Too many people involved, too much area — and you run into scheduling difficulties again. But we're working on it.

"Besides, he went on. "I haven't even mentioned some of the more unique games we've come up with."

"Such as?"

"Peterson grinned. "Well, the one you're holding in your hand is *Shoot-Out!* That's our version of a Wild West confrontation between the Sheriff and the Gunslinger. There's

Hunt! and *Obstacle Course,* which are self-explanatory, I think. *Shark Battle* is another unusual one, as you might expect."

"All right," Wallace said. "What's the price tag?"

"It's not cheap," Peterson said ruefully. "But you're already paying the basic rental fee for the system. Attaching the new equipment will increase that by, say, another thousand a year."

That's not too bad, Wallace thought. "And the cartridges themselves?" he asked.

Peterson shook his head. "Steep, but I think you'll agree it's well worth the price."

"How much?"

"Five hundred dollars per cartridge — but we hope to get the price down later when the games get popular. And of course, there's the regular per game charge."

"Does *Control* come with the regular ten day trial?"

Peterson smiled. "Of course, Mr. Wallace. And you know all our games have a money back guarantee."

Wallace glanced at his wife. She was staring at him expectantly. She was probably thinking about the *Ballet* cartridge. Or maybe it was *Shark Battle.*

"Okay," he said to Peterson. "Let's see how it works."

* * *

Wallace heard a twig crack and judged the noise to be somewhere off to his right and a bit ahead of him. Dense foliage surrounded him, and only a few weak rays of light pierced the tops of the giant trees around him.

He moved carefully. The soft squishing sounds of his boots on the dead leaves of the forest floor counterpointed with the vague background voices of the birds and insects.

Something moved on his right. He raised the rifle to his shoulder, took aim through the scope, and fired at the shadowy form that darted behind a tree.

He heard the bullet explode from the rifle. It grazed the tree, raising a shower of splintered bark — but he'd missed.

Wallace was playing *Hunt!* After Peterson had shown him the full game catalog, he'd chosen this game as the most appealing. His wife had picked *Tennis.*

It had taken nearly a week to learn the ins and outs of the new keyboard controller, but he'd finally gotten the hang of it, and he was getting better all the time.

His surrogate was hiding behind a tree. Wallace had no idea now where his opponent was. His fingers moved over the keyboard and the surrogate took a step out from cover.

A bullet whined past his head, and he threw himself (it was easier to think of the surrogate as himself) to the ground. He lay there, motionless. Somehow, his opponent had managed to work his way around him.

The game had begun, as usual, at the Clubhouse. The surrogates were introduced to each other for purposes of identification. There was a quick handshake, and then his antagonist had set off into the forest, with Wallace following a few minutes later.

The object of *Hunt!* was simple. Two surrogates were sent into an unfamiliar environment — a forest, jungle, mountains — then the first one to track down the other was the winner. It was an incredible challenge to outwit your opponent when you could rely only on the sight and hearing of your surrogate.

So far, Wallace had played *Hunt!* five times. His first two surrogates had been killed — but the last three had come through without a scratch, wounding two opponents and killing the last.

Wallace had been slightly concerned about using live ammunition in the rifles. Not that the actual *shooting* bothered him; after all, it was only a vidgame. But he wondered about the surrogates and their families.

"Remember," Peterson had said. "These people are volunteers. They need the work. They're well-paid, fully insured, and Xtronics provides a substantial death benefit to survivors if necessary." Wallace had been unable to argue with that.

But he had more immediate problems. His opponent was somewhere behind him. He stayed down, his face (well, the surrogate's face) pressed into the dirt. He crept around the tree until he was facing the direction from which the last shot had come, then he rose to a low crouch.

He started forward, eyes moving back and forth, ears straining for any sound from the TV speaker. Suddenly, he heard a low rustling on his left. He spun, and without even lifting the rifle, fired into the underbrush.

At the same moment he heard the explosion of his opponent's weapon. The world spun around him and seemed to fall away from his eyes.

Wallace realized instantly his surrogate had been hit, but the green light on the control console was still on, so he knew his man wasn't dead. He ran his fingers over the keys, ordering the surrogate to stand up.

The response was sluggish, but slowly, the TV picture changed as his surrogate struggled to his feet. The scene lurched in front of him, and Wallace guessed the surrogate was limping. He'd obviously been hit below the waist, probably in the leg. But as long as the green console light shone, he knew his man was still able to move.

He circled around the clump of undergrowth and put his back against a tree, listening. With one quick motion, he whirled in the direction of his last shot and brought his rifle into firing position.

There was no need. His opponent lay face down on the ground. He approached cautiously and touched the limp body with his boot. There was no movement. He bent down and turned the man over. Blood still gushed from the hole in his chest, and the face was shattered by pain and surprise. The man was obviously dead.

Suddenly, the picture on the TV screen vanished, and the green light on the console turned red. His surrogate was either unconscious — or dead. Wallace touched the "Game Over" button on the console and waited.

About 10 seconds later, the screen lit up again. *"You Win!"* it said; then it reeled over a flurry of other information: *Time Of Hunt:* 24 min. 13 sec.; *Cause of Death:* Chest Wound; *You Have Been Wounded In The Thigh, But Suffered No Major Damage. Congratulations!"*

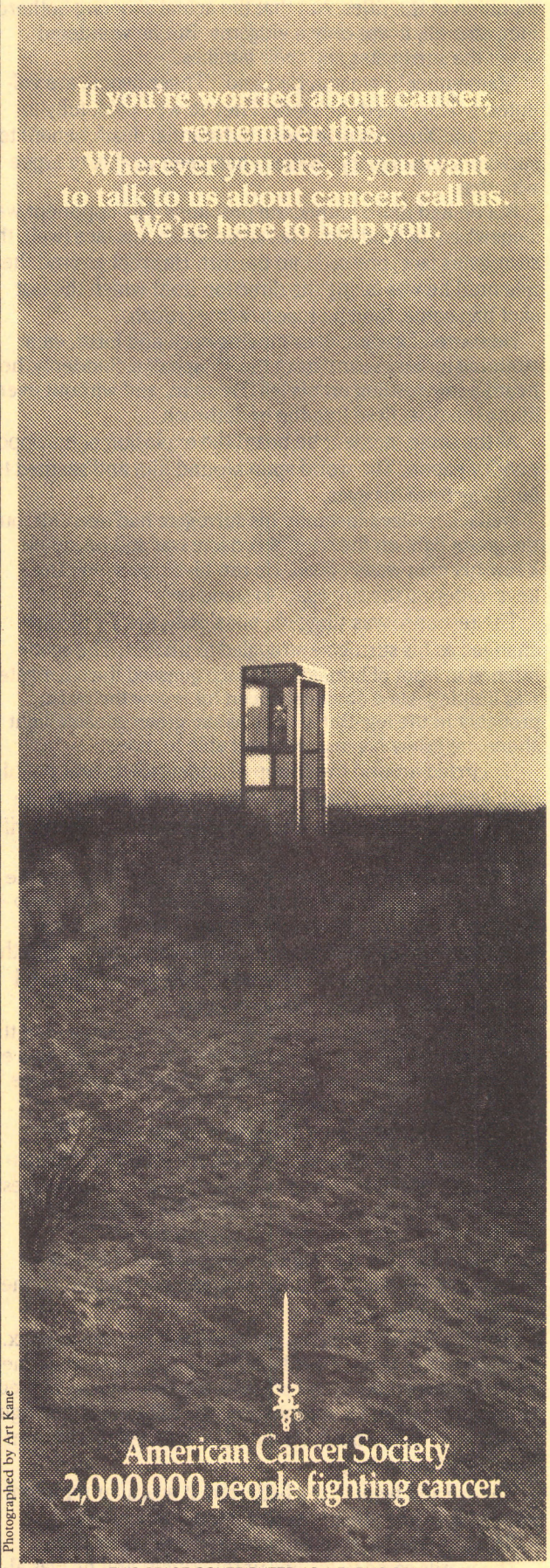
Wallace touched his thigh for a second, as if feeling for the wound. He smiled, leaned forward, and clicked off the vidgame console and TV.

He felt his heart slowing, his breathing starting to relax. The incredible tension he'd felt before the game was gone now. The pressures of the office — the board-room maneuvering, the cut-throat competition, the kill-or-be-killed fight to stay alive in the business world — had been lifted from him. He felt wonderful.

He rose and went to the bedroom. It was after midnight and his wife was already in bed, though not asleep.

"Did you have a good game, dear?" she asked him.

The words came to his lips unthinkingly, and he was almost embarrassed to hear them himself. "Not nearly as



Photographed by Art Kane
THIS SPACE CONTRIBUTED AS A PUBLIC SERVICE.

good as the game I'm going to play with you," he said, heading for the bed.

Wallace was no sexual athlete. The Wallace's sex life up to that point could best be described as ... adequate. But that night something seemed to overcome Wallace. He took his time and paid close attention to the details. The intensity of his wife's response told him his performance was well above average.

Yet for some reason Wallace himself felt curiously unfulfilled. No matter what he — or his wife — did, he was unable to experience any real enjoyment, even at the culmination. After it was over, he lay awake trying to figure it out, an enormous emptiness beginning to grow inside him.

* * *

"It's marvelous!" said Albert Pomeroy as he removed the sensor-band from his head. He leaned forward and turned off the vidgame console. The six foot projection TV system built into the wall of his study blinked out.

Mr. Pomeroy was Chairman of the board of the IBEX Corporation. His home — some people would have called it a mansion — was only a few miles from the Wallace's condominium.

"Explain this thing to me," Pomeroy said.

"It's simple," Peterson answered. "Anyone who plays the game is affected for a six to twelve hour period immediately afterward — as long as they remain within a twenty yard radius of the *Control* cartridge."

"That means that if the woman plays I can control her too, doesn't it? I can manipulate either of them — see what they see, hear what they hear, and with this ... " He held up the sensor-band. " ... I can even feel what they feel."

"And it'll work on anyone who owns a *Control* cartridge," Peterson added. "Don't forget that."

"How *does* it work?"

Peterson smiled. "That's a company secret, I'm afraid."

"However it works, it's incredible," Pomeroy said with a shrug. "He never knew I was controlling him during the game and ... after?"

There was a slight pause. "No," Peterson said finally.

Pomeroy shook his head. "It was amazing. Manipulating him through the hunt and ... everything else demanded more skill and concentration than anything I've ever done. I've never felt so exhilarated, so in touch with the world, so *alive!*"

He removed the gray metallic cartridge from the slot in the vidgame console and examined it with wonderment. "Do you have a name for it yet?" he asked.

"We're thinking of calling it *Power!*" Peterson said.

"And how much will it cost me?"

"Attaching the keyboard controller permanently will add another $5000 to your yearly rental, and the cartridge will cost you another five thousand — plus the regular per game fee, of course. Naturally, we hope to get the price down when the game becomes more ... popular."

Pomeroy stood. He could easily afford that, and if tonight were any indication, the game would be worth every penny. He went to his desk, took out his checkbook, and began to write.

"It's fantastic," he said, signing the check. "You people have outdone yourselves this time. It's absolutely awesome to know you can have this kind of power over people."

"Yes," Peterson said, putting the check in his briefcase along with all the others. A brief smile flashed across his lips. "It certainly is."

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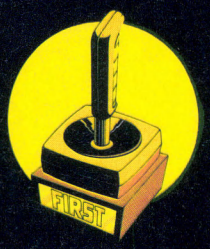
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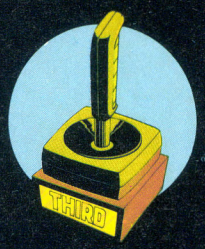
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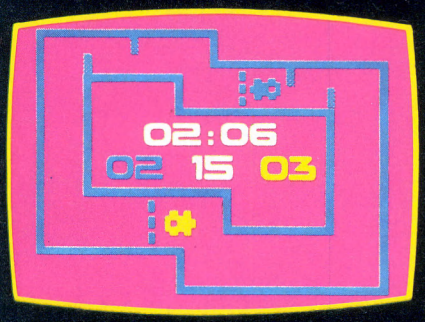
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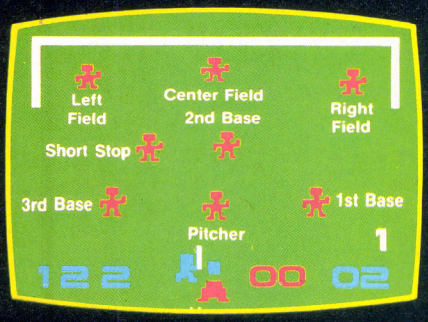
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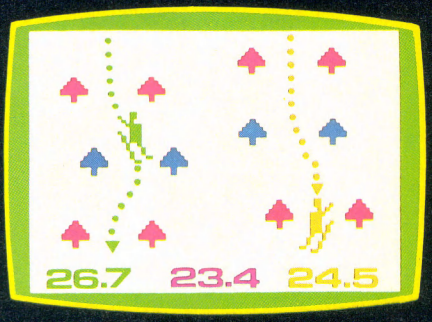
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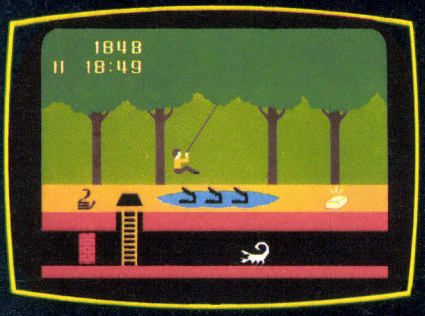
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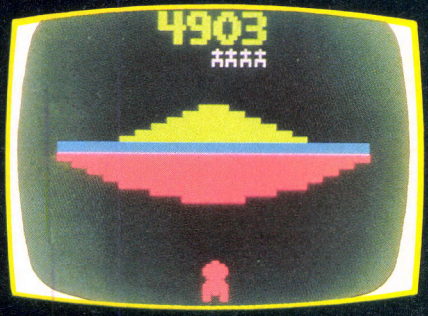
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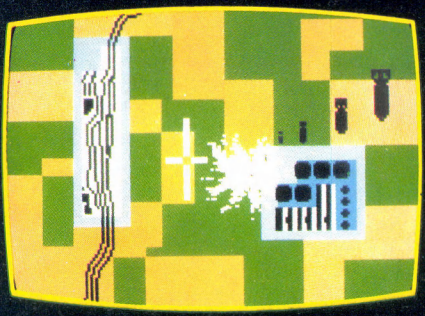

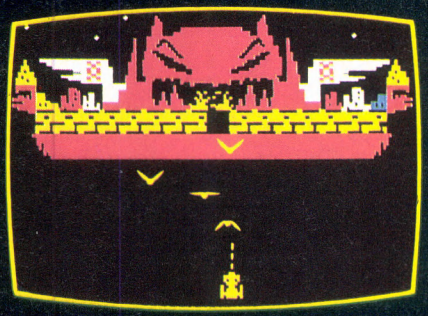

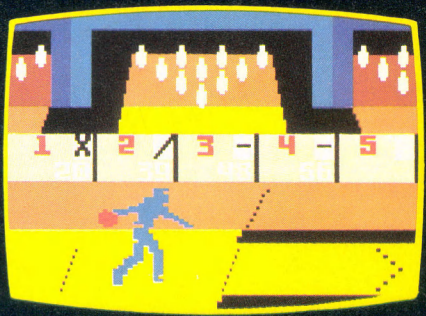
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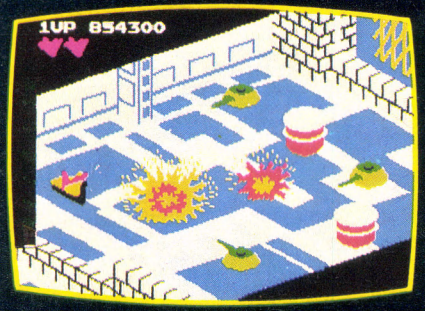
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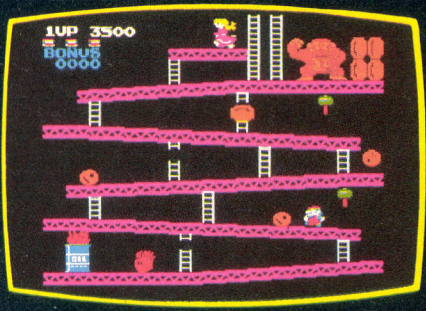
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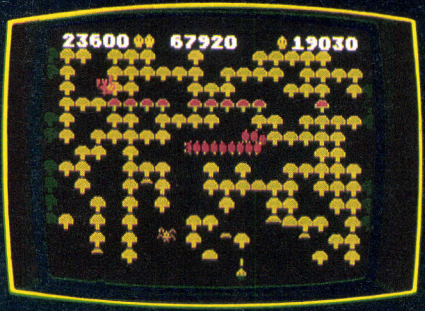
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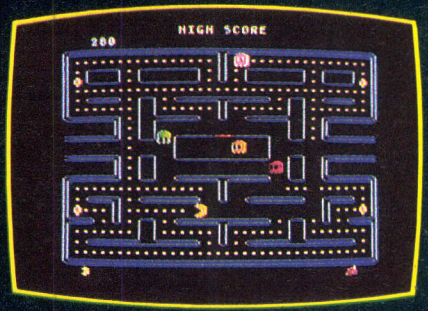
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Presenting: The First Annual Vista Awards!

Part Two of the first annual* Videogaming Illustrated *"Vista" Awards

Last issue we published the opening installment of our "Vista" Presentation — the Videogaming Illustrated Software Thrall Awards. In case you missed it, the staff and writers of this magazine were asked to vote for the best games on the market in various categories.

The winners were as follows:

BEST 2600 GAME

Winner: *Megamania*
First Runner-up: *Pitfall*
Second Runner-up: *Demon Attack*

BEST INTELLIVISION GAME

Winner: *B-17 Bomber*
First Runner-up: *Demon Attack*
Second Runner-up: *Las Vegas Poker and Blackjack*

BEST ODYSSEY GAME

Winner: *UFO*
First Runner-up: *K.C.'s Krazy Chase*
Second Runner-up: *Demon Attack*

BEST 5200 GAME

Winner: *Centipede*
First Runner-up: *Pac-Man*
Second Runner-up: *Defender*

BEST GAME BASED ON NON-ARCADE MEDIUM

Winner: *The Empire Strikes Back*
First Runner-up: *Superman*
Second Runner-up: tie between *Fantastic Voyage, Tron: Deadly Discs,* and *Journey/Escape.*

BEST COLECOVISION GAME

Winner: *Venture*
First Runner-up: *Ladybug*
Second Runner-up: *Zaxxon*

BEST ARCADE ADAPTATION

Winner: *Pac-Man* (5200)
First Runner-up: *Zaxxon*
Second Runner-up: *Centipede* (5200)

BEST EDUCATIONAL GAME

Winner: *Sid the Spellbinder*
First Runner-up: *Word Zapper*
Second Runner-up: *Nimble Numbers Ned*

BEST 2600 SPORTS

Winner: tie between Super Challenge and RealSports *Baseball*
First Runner-up: *Boxing*
Second Runner-up: *Video Olympics*

BEST INTELLIVISION SPORTS

Winner: *NFL Football*
First Runner-up: *Horse Racing*
Second Runner-up: *Boxing*

Here, now, is the second group of winners in the Vista competition. (Please note: there were no awards for ColecoVision and 5200 sports. At present, the categories are too sparsely populated to make balloting worthwhile.)

BEST ODYSSEY SPORTS

Sports cartridges are not a strength of the Odyssey system, and the games listed below were frequently cited as having won by default.

The only racing game which made the winner's circle in any category was the first place award for *Speedway/Spinout.* However, most voters took pains to note that this was *not* due to the extraordinary gameplay of this cartridge, but the dearth of candidates in the Odyssey catalog.

The two games are on the same cartridge, and *Spinout* was inarguably the favorite. In it, players must race one another around a tortuous course. In *Speedway,* the player simply passes other cars.

Baseball took second place and *Alpine Skiing* third. Interestingly, only *Computer Golf* took any other votes: *Bowling, Volleyball, Football, Electronic Table Soccer,* et al, won nary a nod.

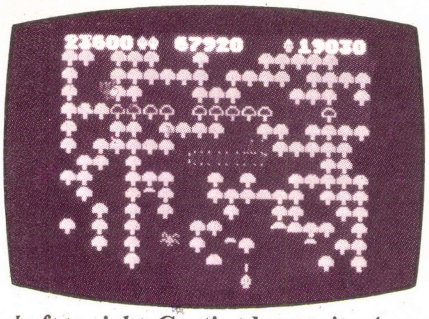
BEST 2600 GRAPHICS

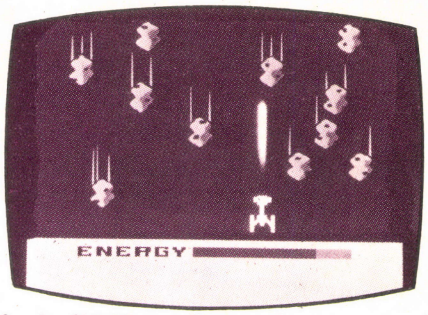
Each of the voters was tutored prior to balloting that this and *all* the graphics categories should not be judged in terms of the most *dazzling* pictures. Rather, the electorate was to select the games whose graphics were most ideally suited to gameplay.

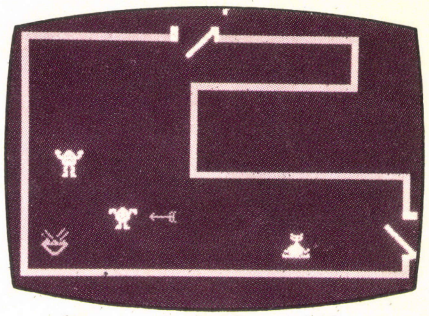
Obviously, it would not be fair to judge a relatively detailed screen like *Dragster* by the same standards as the cluttered but simple course of *Pac-Man.*

This was a close one where first and second place were concerned.

Pitfall edged out *Phoenix* for the top spot, the animation and atmosphere of the former squeaking past the animation and arcade fidelity of the latter.







Left to right:* Centipede *won its Award for its fidelity to the arcade game as well as on its own merits. Best 2600 game went to* Megamania *for its frantic but fun gameplay.* Venture *was the winner in the best Colecovision game category.

The fact that *Pitfall* packed so much color and so many characters and props into the cartridge was the deciding factor.

Third place belonged to *Grand Prix* for its color and animation. Surprisingly, Imagic's popular *Demon Attack* was not among the top contenders, apparently booted out of the running by the newer *Phoenix.*

Among all the runners-up, most were Activision games.

BEST INTELLIVISION GRAPHICS

B-17 Bomber won again, its multiple screens and extremely evocative scenes of flight and combat being noted over and over for the win. Many voters were particularly impressed with the animation and realism of flaming enemy fighters tumbling earthward.

Imagic's *Demon Attack* followed it once again, the graphics on the Pandemonium level and planetary vistas, not to mention the dodging and flitting demons, earning heavy praise.

Third place went to a dark horse: *PBA Bowling.* Though this game placed fifth in the category of BEST INTELLIVISION SPORTS, its ingenius two-screen approach took the prize here. Particularly impressive are the animation of the bowler — seen from the side in the first screen — and the slow motion of the ball striking the pins, seen head-on in the second screen.

Star Strike, Intellivision's highly-touted space combat game, placed a close fourth.

BEST COLECOVISION GRAPHICS

Zaxxon walked away with this award, although a number of disgruntled members of the staff complained that gameplay had obscured objectivity. They claimed that the animation and atmosphere of the second place winner, *Smurfs,* was infinitely better.

Regardless, *Zaxxon* was the overwhelming favorite, lauded for its crisp resolution, three-dimensional effects, fluid motion, and multiple screens. And as much as its lack of high drama may have hurt *Smurfs,* the game did place a strong second for the above-mentioned reasons. Though few people are likely to agree with one enthusiast who noted on her ballot, "Now we don't need a Hobbit game; *Smurfs* is a great evocation of an elfin world," it is not without considerable graphic charm.

Donkey Kong landed the Bronze, though several voters said it would have placed higher had Coleco put more than just three screens in the game and not altered the elements in the second. However, dissociating it from the arcade game, voters gave it a clear third place victory.

BEST 5200 GRAPHICS

Because most of the initial releases for this unit were arcade adaptations, voters tended to favor those which most faithfully reproduced their coin-operated counterparts.

Centipede was the easy winner in this category, and it was the only 5200 game which managed to impress the judges on its own merits. That is, fidelity to the arcade game notwithstanding, they were impressed with the twining, bobbing, high-speed movements of the centipede, not to mention the piecemeal blasting of the mushrooms and the slithering movements of the rest of the *Centipede* dramatis personae.

Many voters were also impressed by the way the characters and set pieces changed colors at different scoring plateaus.

Pac-Man took the number two spot, despite frequent complaints that it was *still* an inferior game played with greater breadth than height. Nonetheless, the characters of the ghosts and gobbler are perfectly rendered, the nuances of Pac-Man's chomping are also present, and the graphics were judged the best that they could possibly be given the different proportions of a home TV and an arcade screen.

Third place was a close win by *Defender.* Though *Defender* buffs expressed some disappointment with explosions, scenery, and gunfire which was less spectacular than the coin-operated version, enough were sufficiently impressed to hand it a narrow win over *Galaxian.*

BEST GAME

Before voting began, everyone on the staff expected the top spots in this category to be a slugfest between ColecoVision and the Atari 5200.

They weren't wrong.

However, there was one very surprising showing for the 2600 hardware.

Centipede was the winner here, hoisted into the top spot by graphics, gameplay, and interest level. Yet, placing a solid second was Activision's 2600 cartridge *Megamania.* It was selected for its unforgiving gameplay and innovative approach to the old slide-and-shoot theme.

Third place went to Coleco's *Venture,* gameplay, pace, and its individualistic musical score being singled out, with *Ladybug* placing fourth.

Fifth place went to the 5200 *Pac-Man.*

For the record, the remainder of the votes were scattered primarily over the Activision 2600, Imagic 2600, and Intellivision spectrum, with Atari 5200 standards like *Space Invaders* winning a few votes as well.

Toward the end of this year, the Vista awards will be presented for the best games of 1983, focusing solely on this year's releases. Thereafter, they will be an annual celebration of the best and the brightest that the field has to offer.

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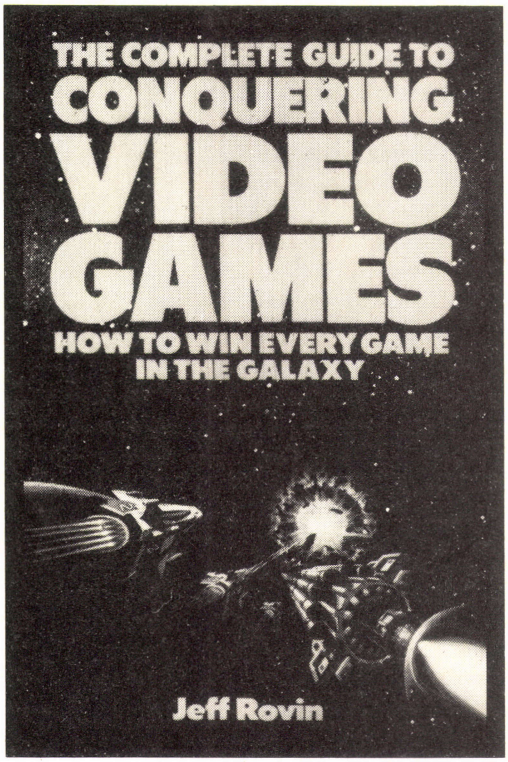

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MACMILLAN

STAR TREK VIDEOGAMES

The final frontier at your fingertips.

by Tim Moriarty

Starfleet Command and a few die-hard Trekkies may not approve, but space-game fanatics will surely be pleased: two videogames based on *Star Trek* are currently in release, and the object of both is to blast Klingon warships to metal confetti.

Sega, perhaps mindful that *Star Trek* fans like to think of themselves and the show as non-violent, have called their game *The Strategic Operations Simulator.* Its purpose is to train Starfleet Cadets in Federation combat tactics. The game, for one or two players, is already in many arcades across the country.

The game begins with a display of Klingon ships, Starbases, and the *Enterprise.* The player maneuvers the Enterprise with the rotary helm control and the thrust button. There is also a warp drive button.

The player's shields, warp drive, energy and photon torpedoes are always in limited supply. Phaser power is in unlimited supply, but phasers can only destroy one Klingon ship at a time while photon torpedoes can destroy several vessels with one salvo. The number of shields available is displayed on the screen. If all shields are depleted, the player must warp to a starbase to have them replenished or risk losing the *Enterprise* to Klingon fire power.

In the first phase of the simulation, the player does battle with a fleet of Klingon battlecruisers and anti-matter saucers. These saucers can attach themselves to the hull and drain off all the *Enterprise's* warp drive energy. If that happens, the player may be stranded, out of reach of a starbase and left to fight off the Klingons at a severe disadvantage.

The second phase of the exercise is

called the Nomad round. The Nomad, a computer-robot complex, is depositing mines. The player must seek out and destroy Nomad while avoiding the space mines.

There are forty simulation levels in all, each level faster and more complicated than the preceding one.

According to a Sega spokesman, their first *Star Trek* home videogame cartridge will be available in the spring. Though it is titled *The Wrath of Khan,* it is said to be an adaptation of the arcade *Strategic Operations Simulator.*

A second home video cartridge is slated for the end of the year to coincide with the release of the third *Star Trek* movie. Both the movie and the game will probably shed the tongue-in-cheek title *In Search Of Spock* by that time.

The Vectrex Home Arcade system has the only other *Star Trek* game currently available. Titled *Star Trek: The Motion Picture,* the game has nothing to do with the subject matter of the film.

The Vectrex game provides a Kirk's-eye-view out the bridge viewer screen. The object of the game is to fight through a swarming fleet of Klingon and Romulan ships to get to the Klingon Mothership, which must then be destroyed.

The player must clear eight sectors of the enemy before coming to the ninth and final sector where the Mothership resides. There is an alternative, however: at the beginning of the game, the player places a black hole in any sector (s)he chooses. The player can jump the black hole and arrive immediately at the ninth sector, and the Mothership challenge.

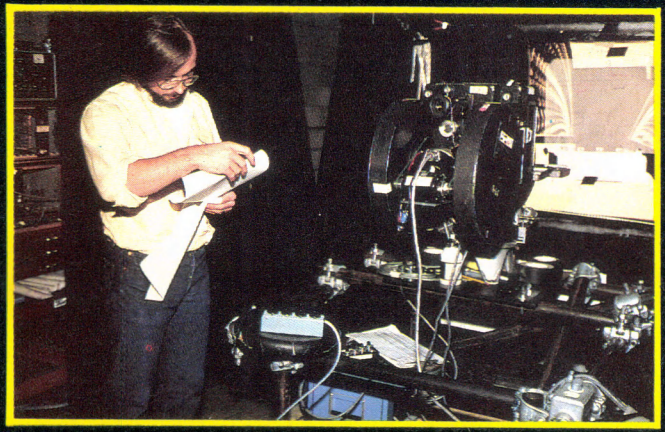
In order to destroy the Mothership, the player must fight off the ship's defenses while waiting for the exact moment to strike: the ship is only vulnerable when her nose is lit up. Also, the ship can only be destroyed by hitting it straight on.

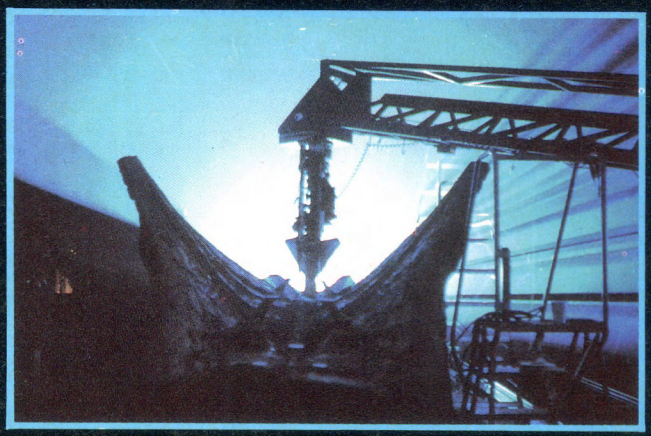
The player is given the opportunity to refuel once in each sector, but even refueling presents a challenge: the space station spins quite rapidly, and the docking procedure must be precise.

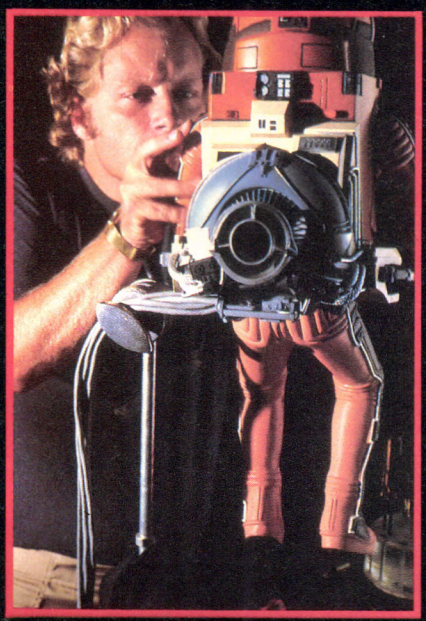
The four Vectrex buttons control the *Enterprise's* movement, her firing mechanisms, her shields, and either the docking maneuver or the jump through the black hole.

Vectrex has no plans to release any further *Star Trek* titles. Their license extended only to the title *Star Trek: The Motion Picture.*

Some time last year, Paramount, Sega's parent company, tried to rescind Vectrex's license to produce their *ST:TMP* game, but failed. According to Hope Neiman of Vectrex, Paramount "wanted their license back when they realized that *Wrath of Khan* was going to be a hit." A source in the Paramount legal department denied Vectrex's interpretation of their motives.







Before computers introduced the world of *Star Trek* to the videogame screen, they brought that world to vivid life on the movie screen.

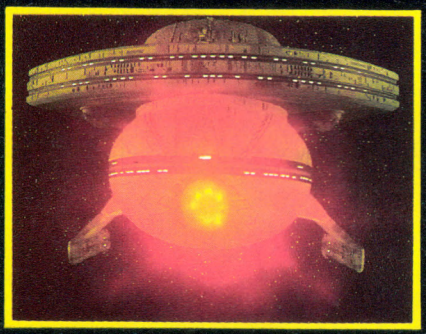
Indeed, computers have become the most important aid to special effects artists since coffee.

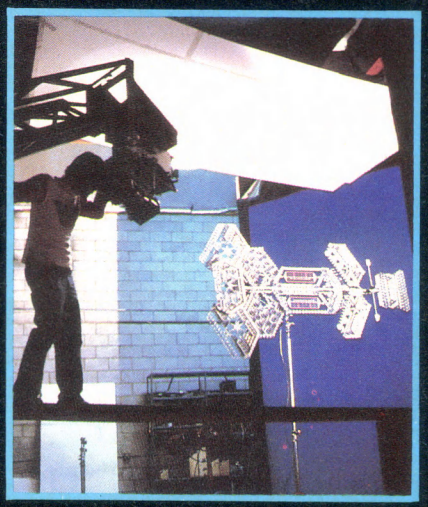
Shown here, in exclusive photographs, are a special effects crew, under the supervision of Douglas Trumbull and John Dykstra, realizing the effects for *Star Trek: The Motion Picture*.

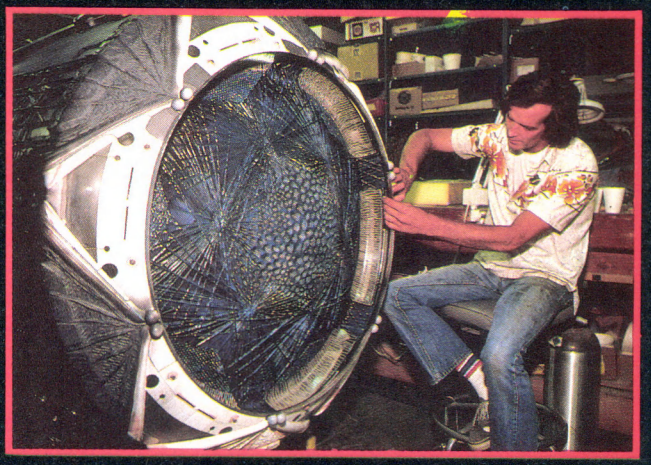
Dykstra created the Dykstraflex system for George Lucas' *Star Wars*. Numerous other effects houses have since adapted that system.

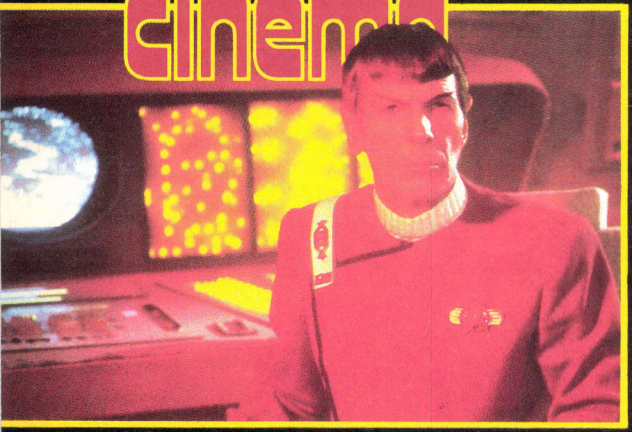
Stated simply, Dykstraflex, and other, similar processes, use computers to control, and remember, the camera's movement in relation to a miniature. While the model remains stationary, the computer-guided camera pans and zooms around it, creating the illusion of movement on film.

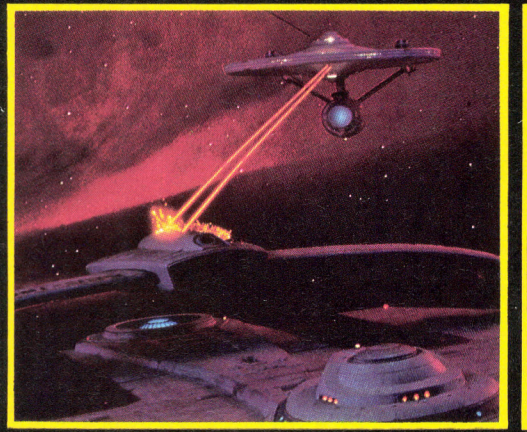
The computer guidance system enhances realism through fluid movement, saves time and money, and makes story-boarding and shot-matching much easier than it ever was for Georges Melies or Pal.

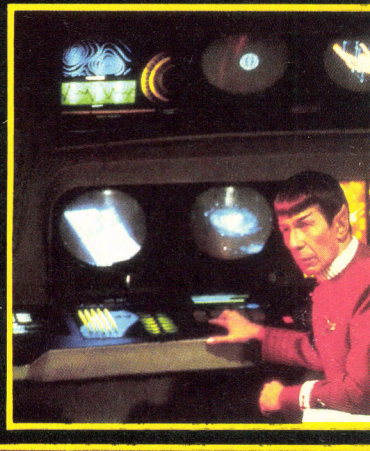








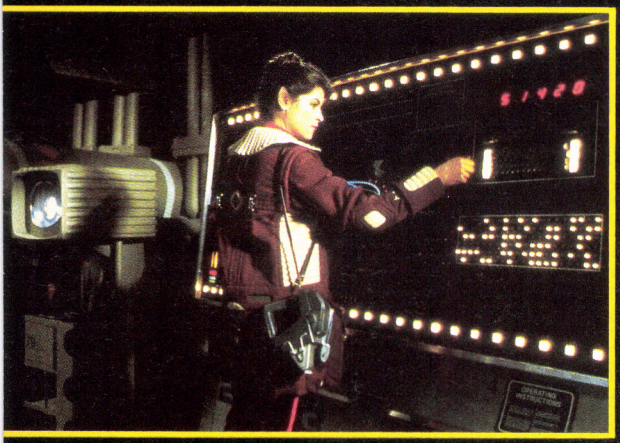


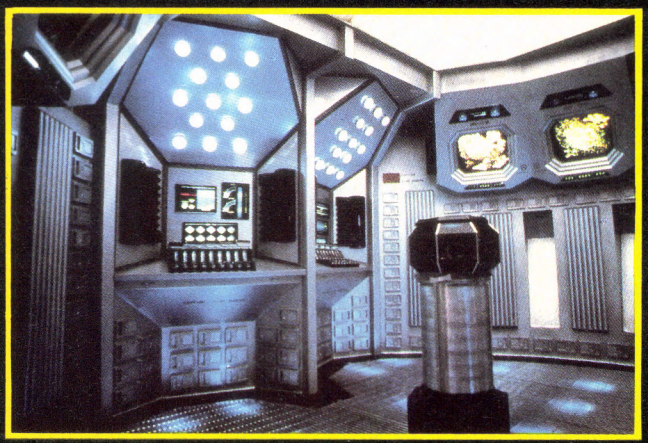


THE COMPUTERS OF STAR TREK

by Allan Asherman

If the popular adventure series has a common theme, it is in its view of computers and computer logic, and how they affect mankind's ability to retain individual identities.





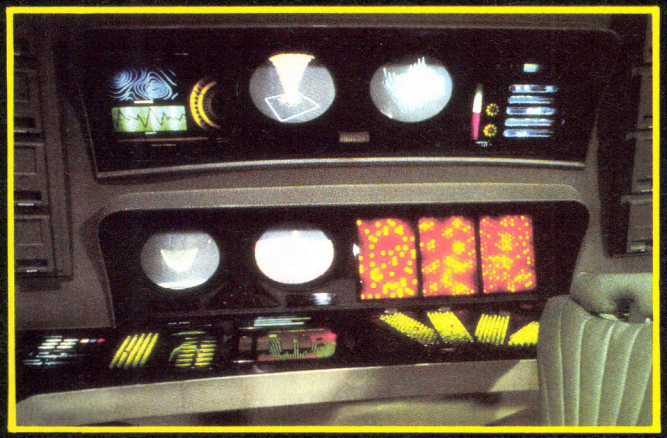
One reason for *Star Trek's* continuing popularity is that, although the stories take place in the future, their characters are essentially 20th Century individuals. *Star Trek's* values are therefore acceptable to today's audiences. The most frequent theme in *Trek* tales is the subject of identity. Can we retain our human values despite our increasing dependence upon machines that seem to think for us? Are computers our servants, or are we theirs?

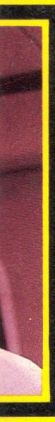
In the world of *Star Trek,* computers serve as storytelling devices, tools to assure survival, and threats *against* survival. The central character in *Trek* is James T. Kirk, whose life is inexorably bound to his Enterprise. The starship, at times, seems to have a life of its own, thanks to its computer. "I give … *she* takes," Kirk once said. Later he gazed at the bulkheads and whispered, "Never lose you!"

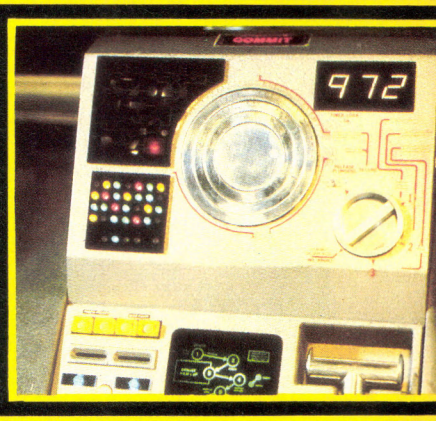
Whether or not the ship's computer is aware of Kirk's relationship to the vessel is never made clear, but the computer *did* once assume an emotional, female personality that addressed the Captain as "Dear." Ordinarily, the Enterprise computer communicated in an emotionless female voice. In "Mirror, Mirror," however, to illustrate the harshness of a parallel-world Starfleet, a male voice was used.

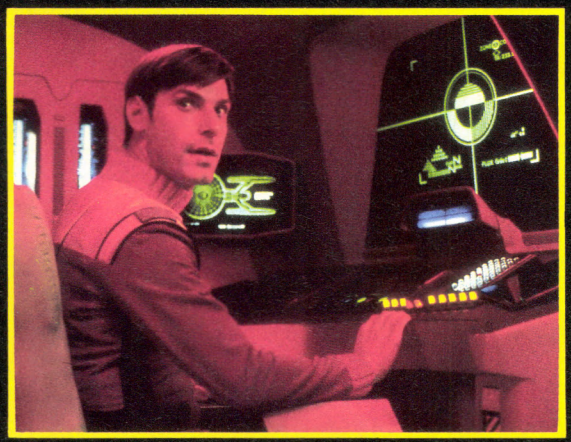
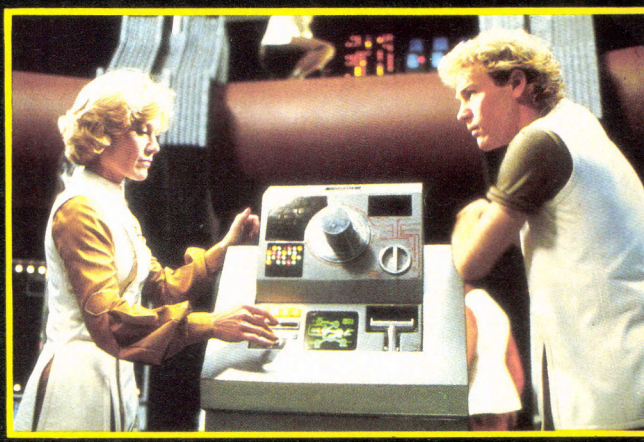
Speaking of emotional male voices, Kirk's existence also seems inexorably bound to that of Mr. Spock, who has at times been called a computer in human form. Of course *we* know better, but Dr. McCoy has his doubts. To be fair to Spock, let's remember that in "Shore Leave" McCoy was killed and restored to life by a highly advanced computer. McCoy (since that time) may actually be considered a computer-in-human-form himself.

Computers in *Star Trek's* era are much more highly advanced than anything we have today. From this fact, the producer and writers assumed that, given sufficient intelligence and initiative, computers could develop personalities and ambitions. Such advanced machines often seemed to take pleasure in depriving humans of their humanity. When this occurred it was most definitely a job for Kirk and Company.







Although it is Spock who has the phenomenal understanding of computers, it is always Kirk who "pulls out the plugs" of the offending artificial intelligences. The Captain is obsessed with his right to life as an illogical human. When this right is threatened he is so angered that he excels in convincing the computers to destroy themselves (in the name of logic, of course). After one such victory, he bragged to Spock "... Didn't think I had it in me, did you?" Spock replied "No, Sir ... I didn't!"

Computers of the future are comparable to newspapers; people tend to believe what they say. In "The Menagerie," Spock used his expertise to create fake orders that had everyone going around in circles trying to determine what was really happening, and why. Fortunately, it was all in a good cause: to aid his former commander.

Fakery was also involved when computer "evidence" clearly showed Kirk committing a "courtmartial" offense. This case in interesting because it was solved with the aid of two individuals of opposite natures: Spock and Samuel Cogley. Spock utilized his knowledge of computers, developed to the point that he could "feel" that the ship's device had been tampered with. To test his theory, he played chess with the computer ... and won. Cogley, on the other hand, was an eccentric old attorney who defended Kirk ... and hated computers.

When all other attorneys had long since switched to computer terminals, Cogley stubbornly held onto his set of lawbooks, preferring to turn his own pages at his own speed. His one main concern was that the evidence of the computer would be believed over the word of the man on trial ... and that the rights of the computer would therefore be higher than those of his client. Oddly enough, Cogley used a computer's sense of logic to prove that the "victim" was actually alive, plotting against the Captain.

The residents of planet Eminiar 7 played the deadliest video game of all in "A Taste of Armageddon." Rather than come to peaceful terms with their enemy, a neighboring planet, the two worlds mutually decided to fight their war by computer, abiding by the ma-

Continued on page 62

conquering: SPIDER FIGHTER

ART BY PAUL LEHR © 1983

by Robert Sodaro

Object

In this Atari compatible Activision cartridge, the player must protect fruit orchards from swarms of ravenous spiders, as they attempt to devour his groves.

These mutant arachnid fruit thieves are fiendishly persistent in their attempt to both protect the mother nest — who is the one that actually steals the fruit — and bedevil players by laying explosive eggs in an attempt to destroy them.

However the grove owner is far from helpless, for he/she possesses a rapid fire blaster with which to dispatch the invaders with alacrity that has to be experienced to be believed.

Gameplay begins with four mother nests on the upper left portion of the screen, and with three orchards on the upper right.

In the first five waves they are oranges, the next five grapes, the following five raspberries, followed by endless waves of bananas.

The grove owner is situated at the bottom of the screen, and is armed with five blasters, one in play, four in reserve. These are used to defend the fruit.

Variations

This is a one player game, and the difficulty increases with each wave, the banana waves being the hardest. The right difficulty switch in the "A" position is the regular game, the "B" position the expert game.

In the Expert game the attackers are much more difficult to hit, and attack with a greater frenzy.

The right difficulty switch in the "A" position gives the defender guided missiles. These missiles will follow the blaster from right to left as it is moved back and forth across the screen.

In the "B" position the blaster shoots straight missiles, thus allowing the grove owner to "lay down a pattern" by filling the sky with bombs.

Scoring

Points are racked up by disposing of the mother nest (one hundred points), the pods (fifty points), attack spiders (fifty points), and the protectors (thirty points). Bonus points are scored by successfully protecting all three fruits in each round. If at the end of each round the three fruits are still there, and the player still has four blasters in reserve, five hundred extra bonus points will be awarded. However if there are less than four blasters in reserve, the player will receive but an extra blaster.

Control

Spider Fighter is played with the joystick controller.

The blaster is moved across the screen by pushing the joystick right and left and is fired by pressing the fire button. The blaster fires missiles in groups of threes. That is to say, by holding the fire button down you will be able to get off three shots in a row, but must release the button to fire again.

In this manner you should be able to fire twice — ie, get six shots in the air during one volley. Though the button *can* be released before all three shots are off, the odds of hitting the spiders *increase* when the player gets off a full burst.

In the advance banana round, the firing action is so quick that the blaster becomes a rapid fire machine gun, allowing three volleys, or nine shots to be on the screen at the same time. In these rounds the attack spiders and nests are faster and more erratic as well.

Patterns

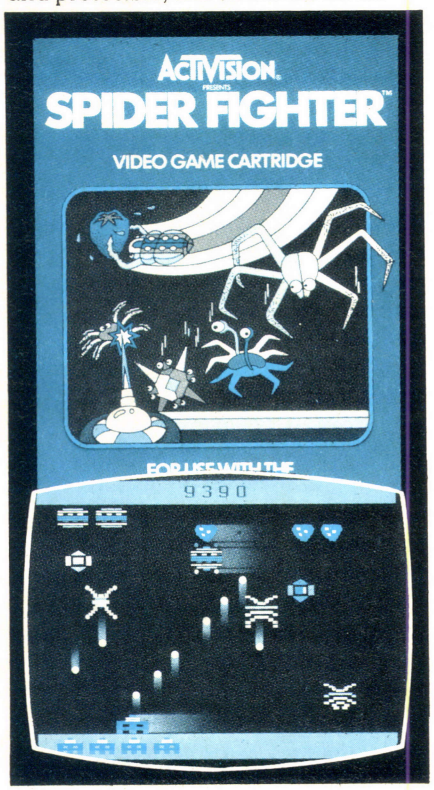
As the game commences, the mother nest approaches from the left side of the screen, and zig-zags randomly for a few seconds. In short order it drops off two pods that scramble back and forth and generally interfere with your shots at the mother nest. When you manage to destroy one of the pods, the mother nest will drop off another.

After approximately eight seconds, the mother nest will level off and make a bee-line for the right side of the screen. Upon reaching its destination, the nest travels to the top and grabs the first fruit in the line, the one farthest to the left. Then the nest heads back for home.

Unless it is stopped before it reaches the left, the nest will devour the fruit and return for more. If it is stopped before reaching the left side of the screen, the fruit returns to the orchard and the next mother nest moves in for the kill.

If, however, the mother nest is killed prior to making a grab on the orchards, the pods turn into attack spiders and jump spastically around while laying their destructive eggs on the grove owner. In the second and succeeding waves the mother nest will drop off protective spiders as well. These protector spiders will not only lay eggs on you, but turn into attack spiders once the mother nest is gone.

When the nest drops off the pods and protectors, she lets them off on



four specific levels. They stay on those levels moving up and down only slightly as they shift from side to side. Once the mother nest has been blown away, and the screen is full of attack spiders, their up and down movement becomes more violent. They also lay eggs at an increased rate of speed.

Strategies

When you first activate the game, the best place to locate your blaster is to the left side, approximately between (and above) the third and fourth reserve blasters, approximately an inch in. From this location it is possible to burn the pods and protectors as they are released from the nest.

The mother nest is immune to blaster fire until the charges have been released, at which point it is as easy to kill as the spiders. Therefore you might want to save your shots until she has released her pods and protectors. This is recommended not because you're limited on firepower, but in case you're caught between bursts when the spiders are finally released. Of course, if you *bracket* the nest, shoot around it, you may get lucky and wipe out both nest and spider just as she drops it off.

When using straight missiles, it is easy enough to lay down a pattern and bracket the sky with missiles by moving the joystick — and thus the blaster — quickly back and forth. This will fill the sky with so many missiles that the spiders can not help but to run into them. The only danger with this strategy is that you increase the risk of running into a dropped bomb yourself.

By staying to the left it is possible to catch the spiders just as the mother nest drops them off, and before they begin their bomb runs. By staying to the left, and moving just enough to dodge their fire, you should be able to rack up a truly impressive score.

Eventually, however, the mother nest will catch on to this tactic, and not drop off any spiders on the left, but travel all the way to the right side before letting her progeny go.

In the guided missile mode, it is more difficult to wipe out those pesky spiders. This is because the missiles will move *with* you back and forth across the screen. Still, there is an advantage to this as well. Guided missiles allow you to fire in front of a spider, and then "bring the mountain to Muhammad" by actually running the missile into the spider.

There are roughly eight seconds between the time the mother nest attacks and she makes her run for the fruit grove. Only the mother can raid the grove. You will be able to spot this maneuver at once, as she heads directly for the right of the screen.

When you see her make this move, it is best to position the blaster under the first fruit in line, the one farthest to the left and fire at it continually. The nest will fly right into your stream of missiles and be obliterated, saving the fruit.

If you are able to get into position in time, stay to the left of her and fire in front as you move with her. If she has the fruit you will be unable to stay in

294K

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one place and fire, as she will be moving too fast to catch her. If she manages to make it all the way to the left and eats the fruit, she will go back for the rest, dropping off more spiders on her way.

In disposing of the spiders, it is always best to kill those in the bottom two rows before killing the mother. If you should destroy the parent first, and those protectors turn to attack spiders, they are very difficult to kill because of their evasive movements and their proximity to your blaster. It is almost impossible to avoid their bombs, so you'd do well to kill them before they become spiders.

If you do kill off the nest first, the best tactic is to stay in one place and fire, striving to get the attacker before it gets you.

All spiders, as well as the nest itself, must be destroyed before another nest will appear.

For the banana waves, nests, spiders, and blaster firepower are speeded up, but all strategies and tactics remain the same. The nest will begin pouring out on the heels of the destruction of the last one with very little respite.

Comment

Activision has outdone itself again, creating a very impressive game. *Spider Fighter* is both unique and thoroughly enjoyable. Its fastpaced action will delight even the most jaded videogamer, while the very straight forward gameplay will attract the novice player as well.

The only drawback to the game, though a small one, is there is no "advanced" game per se. All games start out with the slower orange wave, proceeding through grape and raspberry. Therefore, any player good enough to crank their score up to 400,000 or better (which you can do by surviving to the 51st wave or thereabout) is going to be bored playing the lower levels before getting to where the action is in the banana waves. Still, at worst, going through the slower waves is a good warm up for bananas.

The graphics are not spectacular, save for the times when the player manages to immolate an entire squad of spiders, nest and all, in one burst. Yet the game is fast and easy to play without poring for hours over instructions.

Activision has got another winner on their hands.

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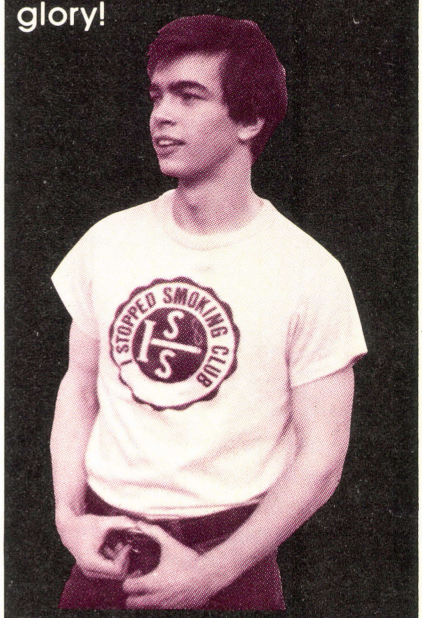

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E.C. Meade looks at books

A FINE JOB

I don't know why, but when writers put together books about computers and computergaming, they invariably do so with more intelligence and sophistication than the hacks who slap together tomes about videogames.

I suspect it's because any moron with a 2600 and an Underwood can grind out a strategy guide to the former, whereas operating a computer requires that one at least read the instructions.

(I'm not being unduly cynical: it's *appalling* the number of letters this magazine receives which gush, "Gee, this new game is *great!* You can plug it in and play without even opening the guidebook!" I only hope those banana beans never grow up to become pilots or surgeons.)

At any rate, a quartet of computer scholars has assembled a book which is not only informative but literate, a volume which belongs on the shelf of everyone who is interested in buying an Atari 400 or 800.

The book is *Atari Games and Recreations,* and it is a complete, easily understood guide to programming your computer. In fact, you should read this opus even if you *hadn't* been planning to purchase a computer. It makes the hardware accessible, hand-holding the reader virtually from unpacking the unit to writing extravagant games. It will get your juices flowing to the extent that you *may* rush right out to your nearest computer shop.

While I could have lived without the everpresent alien mascot Ta*ri created by a Marvel Comics artist, the marginal illustrations are easily ignored. It's like trying to read something along the lines of *The World Book* with Video Victor hovering about every other paragraph.

Regardless, this Prentice-Hall/Reston Publishing Co. book is the best piece of PR the Sunnyvale company could have desired. Authors Kohl, Kahn, Lindsay, and Cleland are to be congratulated; artist Oliff should stick to *Silver Surfer.*

A JOB TO FINE

Try these on for size.

"Call me Ishmael, goddammit."

"The Time Traveller (for so it will be convenient to speak of him) was expounding a recondite matter to us. 'Life is a dungheap,' quoth he."

Herman Melville and H.G. Wells may well be spinning in their sarcophagi, but not just because we've ammended their prose: the standards they set in fantasy/surrealistic fiction are being obliterated by souls of questionable ability.

Avon has just published a novel entitled *Video War,* to which we have opted not to affix the author's name. He doesn't belong on the same page with real writers.

This is a piece of fiction for "young adults," a slice-of-life drama about kids and parents and arcades. *Video War* purports to be about a young man who loves videogames, hates his mother — she's a single parent who is dating an official trying to shut down the arcade — and decides to form a pro-arcade organization with his chums.

If you've ever been to an arcade, you know that players *do* swear like diner chefs on occasion, but *Video War* is just too exploitative in this fashion. After everyone in this work has been called an 'asshole', the author moves up the alimentary canal for other expletives. It's one thing to write in the vernacular; it's quite another to be sensationalistic so that readers will think you're "in touch."

Sailors on whaling ships swore, but Melville, in *Moby Dick,* found more interesting subjects on which to focus his energies. It's *not* a matter of being a prude: it's simply a case of priorities.

Nor does the author stop with flavorful language. When he's not pecking out oaths, he's busy trying to emulate the sounds of the videogame machines — Fleeporpeepeeptiddidit is my personal favorite, with Buddleoopbuddleoopbuddleoop a close runner-up — and indulging in other story-stopping devices, such as doing away with "chapters" in favor of "screens" or running copy vertically and diagonally across the page to simulate a computer screen.

Rubbish.

This isn't writing, it's misfired razzle-dazzle in book form.

There are real people aching to emerge from *Video Wars,* but the pyrotechnics and "slice-of-life" dialogue with which the author has saddled his work will deter you from looking for them.

Good idea; awful execution.

GROANERS

Lest you think we're a bunch of intellectual snobs — which, come to think of it, we may well be, though we hope not in the pejorative — here's a youth-oriented book which is as silly as they come, but fun withal.

The book is called *Ohm On the Range,* it's from Prentice-Hall, and it's a collection of computer jokes.

Author Charles Keller has compiled the worst puns he could find (there's no such thing as a good pun), his efforts having produced the following:

Q: What do you call a wristwatch worn in the twenty-first century?
A: A future-wrist-tick.
Q: What do you get when you cross an elephant with a computer?
A: A five-ton know-it-all.
Q: If it takes two computers two hours to do a problem, how long would it take five computers to do it?
A: Why should they do it at all? The two computers just did it.

And so on.

The illustrations by Art Cummings — some of which are reproduced herewith — have a charm which the aforementioned Atari book lacks.

This hardcover book retails for $7.95, but will make a good gift for your favorite ten-year-old smart aleck.

conquering: PHOENIX

How to raise your game from the ashes

by Robert Sodaro

Object

The Earth is menaced by winged creatures from space in this Atari 2600 adaptation of the arcade hit. Your job is to destroy successive waves of these deadly birds, as well as their parentship.

Each mother ship, or city, is preceded by four squadrons of birds who fly in formation as they bomb earth's defenses. While the first two squads of birds are regimented, the next two groups fly in less predictable patterns.

Yet, the toughest opponent of all is the parentship. It descends slowly, all the while laying down enough firepower to keep you very busy. Once past the parentship, the sequence begins again with a new wave of the small birds.

On your side are five earth ships to ward off the invaders. Each ship is equipped with a force field that will protect it from the bombs of the Phoenix. This field, however, will only last for a few seconds, and takes twice that time to recharge.

Variations

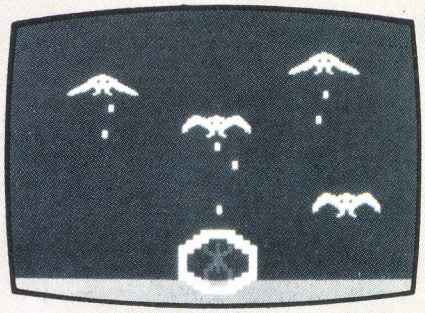
Phoenix is a one player game, the difficulty increasing in each wave. The right difficulty switch has no affect on the game and can be ignored.

The left difficulty switch in the "A" position is the novice game, "B" the expert game. In both games the birds are equally hard to hit.

Scoring

The first two squads of Phoenixes in each wave are worth twenty points each if they are hit while in formation. If destroyed while making a bombing run they are worth eighty points.

With the second two squads of Phoenixes, points are accumulated depending upon where in the screen the bird is blown up. At the extreme top of the screen they are worth one hundred points, with increments of fifty points until they reach the bottom where they are worth five hundred points.



***In some games of this type, you can hide in the corners. Not in* Phoenix.**

If the Phoenix is only "winged," each wing shot away is worth twenty points.

When the parentship is at the top of its run — that is to say farthest from the ground — it is worth more points.

The parentship of the "A" game is worth 1000 to 1400 points in the first round. In the "B" game the ships are worth between 1000 and 1200 points. Ships in successive levels are valued at up to four hundred points more.

Control

The joystick controller is used in playing *Phoenix.*

The player's ship is situated at the bottom of the screen, and is moved by shifting the joystick to the right or the left. The ship discharges when the action button is pushed; the force field is engaged by pulling the joystick back towards the player. Whenever the force field is on the ship is frozen in place, unable to move until the field is gone.

Only one shot can be fired at a time, the player having to wait until the first missile has either killed a Phoenix or gone off the screen. The sole exception to the "one shot" rule is when you are fighting the second squad of Phoenixes in each wave. Here, as in the arcade game, the firing is faster.

While there can still be only one shot on the screen at a time, if the action button is kept depressed it will continue to fire. On all other attack squads the button has to be released and pushed again to fire a second time.

Patterns

Regardless of the level, the fundamental strategy to follow is to *stay on your toes.* Keep moving, be ready to change course as the birds bob and bombs fall, and be prepared to call on your force field.

When the game begins your ship is on the ground, in the center of the screen, a formation of Phoenixes directly above your head. The Phoenixes are formed into a circle consisting of eight birds. As the action commences the lowest two will break from the formation and begin a bomb run at your ship. These two are the only birds which will bomb you; when one of them is killed, another will replace it until *all* are gone.

The second squad of small birds will come at you like a flying wedge, with the point of the wedge at the top of the screen. Again, the lowest two birds will break off and dive bomb you. Again, they are the only two which can bomb. There are eight birds in this squad as well.

The third squad, or first squad of big Phoenixes, will come at you stacked like Boeings at O'Hare. They will then separate, the top four breaking to the right, the bottom three going left. All of these birds are capable of bombing, and *do* so.

In addition to flying right and left, they also travel up and down. On their down-run the lowest bird's wings will brush the ground; if the wings touch

you, you die.

The fourth squad is much the same as the third, save that the Phoenixes start at the right and left of the screen and merge at the center. These birds fly in much the same manner as their predecessors, and are as difficult to nail. Only a direct hit on a Phoenix will destroy it.

Strategies

It takes a fair amount of concentration and hand/eye coordination to dodge incoming Phoenix fire and deliver your own deadly payloads.

Since the first two flocks of Phoenixes fly from right to left and back again, the best way to get them is by shooting just in front of them. By staying a short distance ahead of them, picking them off and staying away from the falling bombs, these two squads should give you little trouble.

When they are hovering close to the ground, it is tempting to scoot under them, blow them up, and score a fast eighty points. A word of warning: don't.

At this range they are deadly, and will kill you more often than you can hope to kill them. If you see one approaching along the ground, wait until it is almost on top of you then throw up your force field. The Phoenix will pass over your head and you will be able to kill it without placing yourself in harm's way.

The second squad is actually easier to wipe out than the first, since you have "rapid fire" during this sequence. Simply start at one side — right or left, it doesn't matter — and begin blasting away. In a few seconds you'll be able to work your way down the line and blow away all of the Phoenixes. Here too, watch out for low flying birds.

As soon as the third squad shows up, wait for them to reach the center. Doing so, they will be lined up like ducks in a shooting gallery. If you time your shots right you should be able to get two or three of them in this one pass.

These birds like to fly all the way to the edge of the screen, so you'd think you could lie in wait for them there. But this can be a death trap, as *they* can come closer to the edge of the screen than *you* can. If you find yourself in the corner be ready to throw on your force field, or to run if the field is depleted.

The last squad of Phoenixes is more difficult to destroy than the third, as these birds do not tend to stack up as much. However, the tactics are still the same; dodge and run, engaging your force field when you have to.

When confronting the parentship in battle, it's best to begin firing as soon as your ship appears on the screen. The city will begin to bomb that spot a second or two later.

Wait until the last possible moment to activate your field, and as soon as it is engaged push the joystick to the

Continued on page 68

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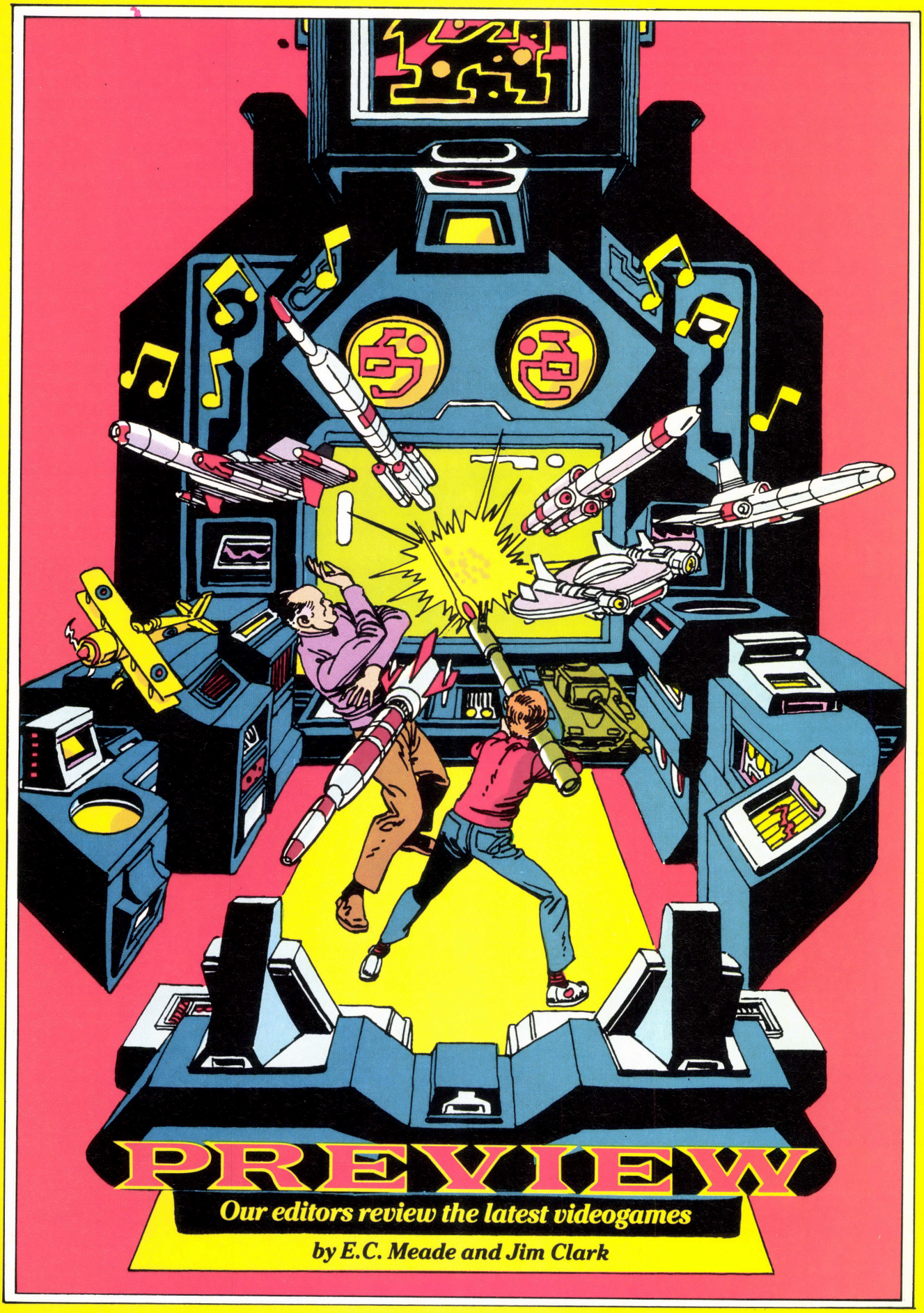
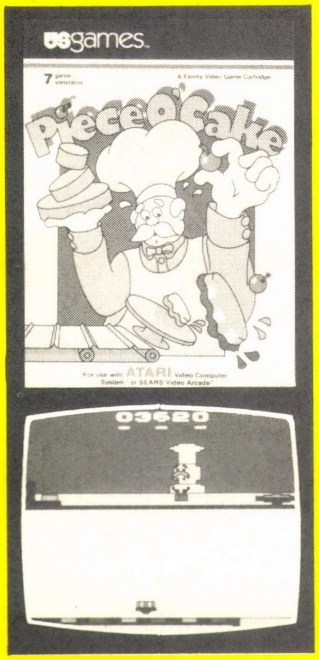


PREVIEW

Our editors review the latest videogames

by E.C. Meade and Jim Clark



Piece O'Cake

Object

You're a baker whose job is to build a three-layer cake. An empty platter moves along a conveyor belt at the bottom of the screen: you must remove each layer from the oven and drop it onto the pan.

Doing so but failing to top it with a cherry before the cake reaches the end of the belt causes your handiwork to tumble off to a messy end.

Ten points are awarded for every layer dropped onto the platter, and one hundred points (or more, depending on the game level) are scored if the cake is completed.

As your skill increases, so does the speed of the conveyor belt.

E.C.M: U.S. Games bills this cartridge as Atari-compatible; rubbish. It's Atari-combative, the kind of videogame which makes you want to tear the circuits from your VCS and use them to decorate the floor of a fish tank.

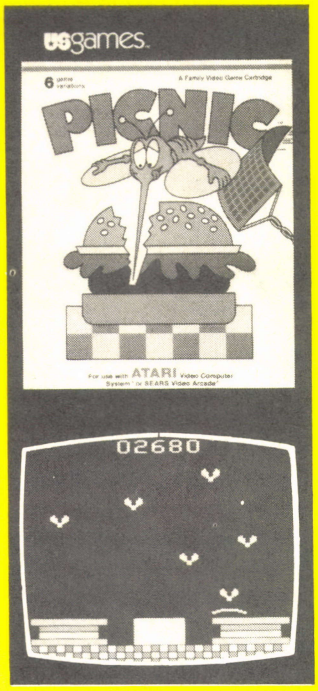
My specific complaints: first, there's no real pressure to build the cake correctly. Once the cherry's on, the platter is secure. You won't score a lot of points, but you won't perish either. Second, there's no challenge. A ten year old will master this game in about five minutes. Finally, there are no variations. Why are there no multiple-platter screens?

The graphics are drab and uninspired, particularly the stark white background which comprises two thirds of the screen.

This is a cake which won't cause your wallet to lose any weight.

J.C.: E.C. commits one serious error in her diatribe. Videogamers ten and under also need cartridges to play. And this one is non-violent, for parents who fret over such things, at the same time challenging in terms of timing the release of the ingredients to hit the moving platter.

Though reminiscent of the arcade game *Burger Time, Piece O' Cake* is a much simpler, quite amusing game. Adults may not enjoy it alone, but they'll have fun playing with the kids.



Picnic

Object

It's a beautiful day for a picnic. But your picnic is interrupted by a swarm of nasty bugs. Fortunately, you came equipped with a swatter and a bug trap. The trick is to swat the bug just as it extends its needlelike tongue in preparation to taking a bite from your cheeseburgers.

Players receive ten points for swatting a bug, twenty for getting it into the trap. Forty and one thousand points, respectively, are awarded for performing those same feats in the successive wave of superbugs.

There are six game variations in this 2600 compatible cartridge from U.S. Games. They range from single player beginner level to two player advanced.

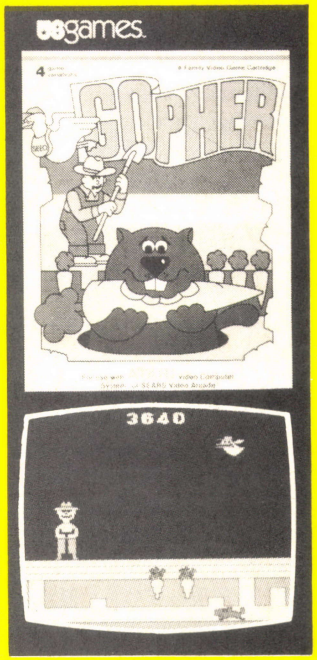
J.C.: As with *Piece O'Cake,* U.S. Games obviously had young people in mind when they created this game. This time, however, they missed the mark.

Though the attack waves are well-populated, consisting of ample hordes of bugs, there is little in the way of strategy or charm. You swat the bugs when they pass over the bug trap, and that's about all there is to it. Though gameplay speeds up from wave to wave, it never gets going fast enough to be really captivating. Good for children who need to hone their reflexes, ie following an erratic object around the screen. Dull going for everyone else.

The graphics are effective but sparse: the bugs *look* like bugs, though the cheeseburgers and environment — no trees, grass, playground, lake, anything to evoke a picnic — leave much to be desired.

E.C.M.: No doubt about it, this one's *really* turgid going. To call a few bobbing blobs and stacks of color insects and a picnic table shows that the U.S. Games people have great imagination — though only when it comes to naming videogames. Designing them is another matter.

I'm not going to stand here and trash *Picnic.* Instead, I'll just recommend Atari's *Frog Pond* or M Network's *Frogs 'n' Flies,* both 2600 compatible, which offer a similar scenario with the graphic flair of amphibians hopping and bug-gulping from lily pad to lily pad.



Gopher

Object

Gopher allows one or two players the opportunity to stop a merciless attack on a carrot patch. Grab a shovel and fill the holes before the pesky ground squirrel tunnels over and eats your trio of prized carrots.

Since this 2600 game does not allow you to hop back to the barn for seeds to replenish your dwindling harvest, a duck is thoughtful enough to fly by and drop a seed every now and then. Catch it and plant it and you have a new carrot. The trick is to do so while keeping the gopher under control, drubbing it with a shovel and filling the holes for points.

E.C.M.: I've got to admit, clever as this U.S. Games cartridge is, braining a warm-blooded little creature is not much fun. Wasting cold-blooded aliens, yes. Furry mammals ... I've got

a mental block there.

Still, there's no denying that U.S. Games has finally come up with an original and entertaining concept. The graphics, though simple, enhance the storybook nature of the game — which is not to say that *Gopher* is storybook *simple*. The gopher is wily, and planting the seed is sometimes maddening. You'll find yourself particularly enraged when your quarry fakes you out, popping up just to stick out its tongue and then vanishing.

Fun for all ages, *Gopher* is not a game which will collect dust on your shelf.

J.C.: I'm not so certain this cartridge won't overstay its welcome after a few weeks. The main attraction, for me, was seeing kids yell at the gopher; if they tire of that, and master the relatively simple tactics of gameplay (see below), there's nothing left. I'm unconvinced that adults will find it terribly engrossing.

If you stay close to the carrots and move back and forth with the gopher — who, it should be mentioned, is always visible in a cutaway view of the farmlands — you stand a good chance of nailing the scavenger as soon as it breaks through the surface.

Gopher is fast-paced, and if you've been shortchanged in the lightning-swift reflexes department, you'll get your money's-worth from the game.

However, I found it to be a one-note cartridge. More character would have helped, such as an attract mode which defines the personality of the gopher. If the animal had the sly bite of a Bugs Bunny or Road Runner, nailing it would have been more satisfying.

Gamemakers would be wise to consider these subconscious and/or psychological aspects before going all-out for action.

M.A.D.

Object

In the 2600 compatible *M.A.D.* (Missile Attack and Defense), you defend six energy stations against attack from jet planes and helicopters.

These craft don't launch missiles; rather, kamikaze-like, they approach in horizontal rows and, peeling out, drop right onto their targets.

Your job is to protect the stations using your ground-based photon cannon, which is located in the center of the screen.

Each successive wave of aircraft becomes more aggressive.

E.C.M.: The single-player game is a big cipher in my book, an unimaginative, utterly unchallenging game. You've seen it all before, in *Atlantis* and *Missile Command*. Only here, it's slower and less exciting.

Consider: before dropping, each craft changes from its natural color to white. You always know from where the attack is coming. The planes do everything but self-destruct. The whole thing is so dumb one suspects the programmer must also write network TV on the side.

The two-player game is much better. U.S. Games would have been wiser to limit the cartridge to this variation and pack more graphics and options into it. While one player operates the cannon, the other uses a gunsight to select which aircraft will fall, where and when.

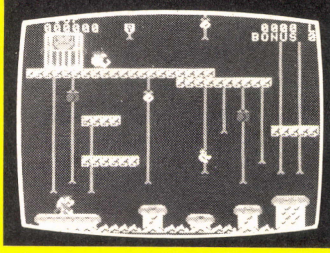
The offensive player gets to be a real nasty soul watching the defensive player hop M.A.D.ly about to keep from getting blasted.

J.C.: Personally, I enjoyed both *M.A.D.* games, though the two-player edition *is* inarguably superior.

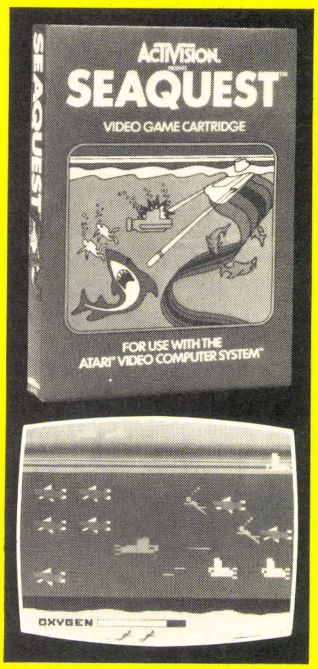
The single-player game is not terribly innovative, true; however, the mobility of that single cannon is much greater than the clumsy three-cannon setup in *Atlantis* or the plodding gunsight in *Missile Command*. This thing sprays projectiles all over the map, which is great for one's hostilities.

It's unfortunate that *M.A.D.* comes so late in the day for this theme. Objectively speaking, this game is not bad of the type. However, I'd like to see the motif retired.

Coming in our July issue



In our next issue, Jim Clark and E.C. Meade will be reviewing Coleco's new *Donkey Kong, Jr.* (left), as well as *G.I. Joe, M*A*S*H,* and *Frankenstein's Monster,*



Seaquest

Object

Divers are returning to your sub with gold and other treasures. Your task is to retrieve as many divers as you can, simultaneously shooting sharks and enemy subs, before your oxygen runs out.

You get points for every enemy you waste.

Every so often it's necessary to return to the surface for air. This will cost you a retrieved diver, though if you surface with six divers aboard, your point score is boosted considerably.

J.C.: As one of the few people on earth who loved Activision's *Fishing Derby*, I'm glad to see them back with aquatic characters for the 2600.

This is one of the less harried Activision games. Unlike *Megamania* or *River Raid*, where the pressure is on all the time, you can choose to shoot or duck sharks and subs, let a diver pass if need be, or return to the surface for air when necessary.

Even at its faster levels, this is not a powerhouse game in terms of speed. Instead, *Seaquest* splendidly creates an underwater environment and lets you move

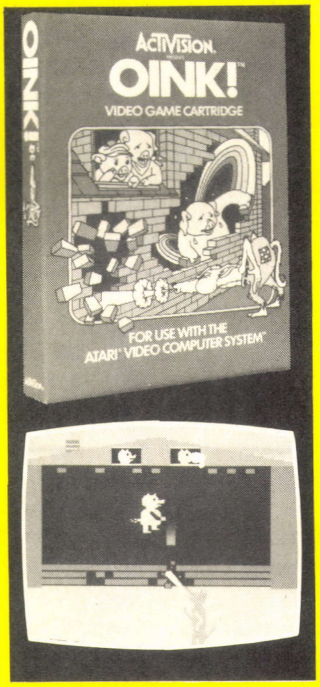
among it as you wish — as observer or frantic treasure-seeker.

A delightful change-of-pace.

E.C.M.: Jim can *keep* the atmosphere: I found this pretty slow going. Even when the sharks come in groups and dog the divers like a shadow, they were not terribly difficult to evade. Even if you opt to go for all the marbles, shooting everything in sight, *Seaquest* never really gets cooking as fast as Activision's other games.

Of course, everything is relative. It's still more harried than most of what the competition has to offer. Yet, too complex for kids and too slow for real enthusiasts, I can't quite see the market for which Activision was gunning — or harpooning, as the case may be.

Good, but nothing more.



Oink

Object

Bigelow B. Wolf is huffing and puffing and blowing the pigs' house down.

As the porcine hero, your task is to grab bricks and patch the holes blown by the barrel-chested wolf. Points are awarded for each brick you slip into place; however, each time you get in the way of the wolf's air-stream, your pig loses a brick.

If the wolf cuts a large enough hole in the house, it's bacon for dinner.

J.C.: This 2600 game is a clear example of what *character* means to a videogame.

Gameplay is similar to Odyssey's *Blockout/ Breakdown* or Atari's *Breakout,* with squarish pieces being knocked from a wall. However, the personality of this game — the vivid colors, the way the pigs waddle back and forth, the evocative sound effects, the sinister wolf — give this game more appeal by far than the others.

And it's a good game to boot.

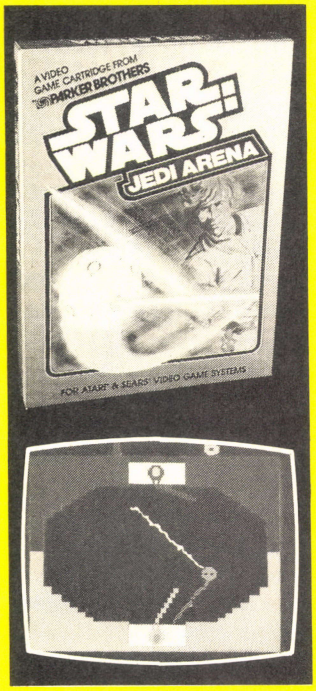
The bricks are above, a new row of fresh bricks appearing each time you use them all up. You can only hold one brick at a time, and you'll find it maddening to try to patch the wall, which is under your little piggy feet. Just when you think you have one section under control, the wolf blasts away at another, drawing your attention and returning to the first section.

Fast, simple, and pleasantly addictive. And take special note of the sunset behind the house. A beautiful, inspired touch!

E.C.M.: You'll be surprised at the number of strategies which you can — and must — evolve for this game. This game isn't just a matter of filling holes: you've got to repair the damage so that there isn't a slot large enough for the wolf to get at your pig, yet at the same time you must grab the bricks in such a way that you won't use them all up in one area.

For instance: if you fill a big hole on the left using bricks soley from the left, and the wolf keeps battering at that side, you'll have to run to the right to get bricks. This necessitates crossing the line of huff-and-puff, which will cost you further bricks. Better to cross the screen when there is still enough wall left to protect you.

But that's just one nuance of the game; there are many more. It's become a cliche, but here goes: Activision has done it again.



Jedi Arena

Object

You are standing behind a force field, your lightsaber projecting from it. Your opponent — the computer or another player — is similarly positioned on the other side.

Between you is a Seeker, which hurls energy bolts at both players. Your action button controls when the bolts are fired. Meanwhile, the lightsaber protects you from the bolts, at the same time dictating the direction in which the bolts fly at your adversary. If your weapon is pointed northeast, the bolts will fly northeast.

Of course, you can't always point the way you want: you will be using your lightsaber to deflect the beams directed from the Seeker by your opponent.

Your force field disintegrates a chunk at a time, losing a piece each time the beam strikes. If the beam has a clear path at you, and your enemy directs the bolt through that path, you're an ex-Jedi Knight.

This 2600 game is based on props from the film *Star Wars.* It is a lethal variation of Luke Skywalker's session with the training Seeker.

E.C.M.: My reaction is a resounding "big deal." The sound effects and lightning graphics are superb, absolutely breathtaking; quite possibly the finest I've ever seen on any videogame unit.

But gameplay? Even at the fastest of the three levels, all you're *really* doing is intercepting bolts, biding your time until you can fling a few of your own.

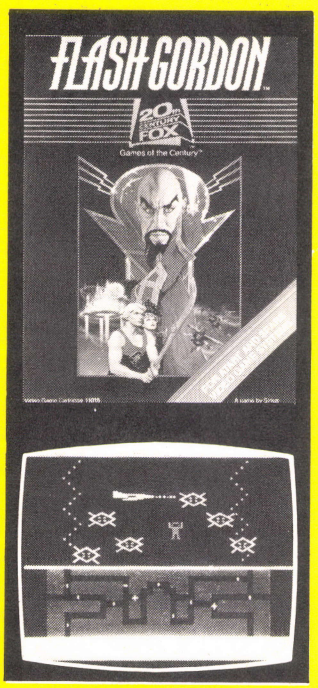
I'll give Parker Brothers credit for creating a novel and technically dazzling game, one which is unlike anything else on the market. It's a shame they couldn't have come up with one that was engaging to play.

J.C.: I'll admit that E.C. is a better videogame player than I, but battling the computer on level five of *Jedi Arena* is not as easy as she makes it sound. It humbled me, and after two hours with the game I still hadn't come close to winning. The easy levels, yes. Level five, no.

For the average or even above average gameplayer who likes a sizzling science fiction game which is *unique,* I commend this highly.

Young players will be able to grow into the more difficult levels, and *Star Wars* buffs will have a field day pretending to be Luke Skywalker.

I do, however, agree with E.C. about the special effects: they're mindboggling.



Flash Gordon

Object

The heroic earthman must rocket into space and enter Spider City on the hostile world of Mongo. There, he must rescue spacemen who drift by, simultaneously shooting down enemy patrol ships and destroying Hatching Pods and generators.

The bottom one-third of the screen is a radar overview showing Flash's spaceship as it moves through the maze-like city.

J.C.: Though it has little to do with the legendary comic strip character, *Flash Gordon* is a fast-paced and entertaining game. You've seen the elements before, but never with quite so much color and pizzazz; the graphics are crisp and sleek, the movements of the enemy artifacts unpredictable and worthy of your skills!

Like the theme itself, radar-images have been overused of late. However, the *Wizard of Wor*-like maze applied to a fast-moving space game makes for some interesting maneuvers.

Nothing new here, but all of it better-done than you've seen it before.

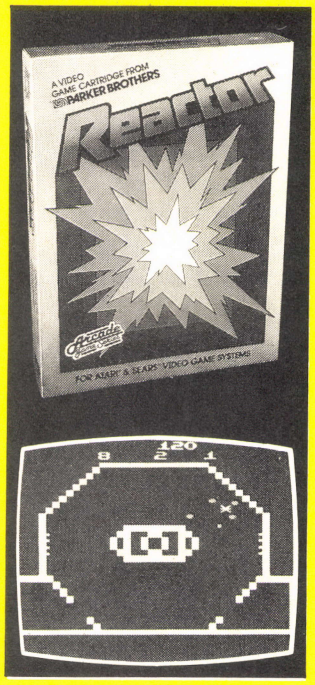
E.C.M.: With all the potential inherent in the Flash Gordon license — the evil Emperor Ming, the tree-kingdom of Arboria, and sundry confrontations seen in the films and comic strips — Twentieth Century-Fox Games of the Century has opted to give us yet *another* game where you rescue "humanoids," flying with the help of radar, and turning forward/backward as you to blast the enemy.

In other words, what we've got here, folks, is a *Defender* clone.

Okay, I agree with Jim: it's a *good* version of that game. This 2600 cartridge is better than Atari's 2600 edition of *Defender.* I'm just a little sick over the exploitation of proven properties and the dearth of originality exhibited by so many of our videogame manufacturers.

Not only that — and I hate to pound away on this point — but I really feel cheated at the lack of anything generically Flash Gordon-ish in the game. Using a license solely to attract consumers is a lazy way of building a reputation. Ironically, with the likes of such rip-off licenses as *Megaforce, Alien,* and now *Flash Gordon* the reputation they're building is a bad one. The artistic, and subsequent financial, failure of the *E.T.* game apparently has not taught Fox Games a thing.

If you already own *Chopper Command* — the *best* of the *Defender*-type cartridges — there's no reason to pick this one up, unless you like enriching the wallets of people who lack imagination and originality.



Reactor

Object

You are granted three ships and three decoys, one of each at a time. With them, you must do away with deadly Leptons, Neutrinos, Positrons, and Photons which follow your ship and attempt to drive it against the "kill walls." The walls cause your ship to dematerialize. By the same token, if you nudge the particles wallward, they will be vaporized.

A number of control rods extend from either side of the kill walls, determining the intensity of the nuclear reaction at the seething core of the power source. By knocking the particles against the rods, you prevent the core from expanding to the point where meltdown occurs. When the rods are quieted in this manner, the nuclear holocaust will be averted.

E.C.M.: I didn't like the arcade game, and I feel lukewarm about this Parker Brothers 2600 cartridge. Considering the drama inherent in the subject matter, the whole thing is just a gussied-up version of *Pong.*

Whenever you've got a game with a virtually featureless, asterisk-shaped cursor and a faceless blob of an enemy, gameplay had *better* be topnotch to hold your attention. That isn't the case here. *Reactor* reminds me of Atari's old *Indy 500* cartridge, where you race on ice and try to keep from smacking into the course walls.

The presentation is moderately exciting due to the spectacular sound effects and throbbing nuclear core, but you'll tire of that pretty quickly.

The whole thing would have worked better by feeding the player's fantasy: an attract mode in which a suited-figure enters the core might have done the trick. This game is just too flat, graphically; with its hit-and-dodge tactics, it's also too one-note in terms of play.

J.C.: I only gave *Reactor* a passing glance in the arcades, and now that I've had a chance to get involved with it at home I see why.

E.C. is right: this is *Pong* in Technicolor. It was fun enjoying the subtle embellishments on that theme for a few quarters, but it isn't worth twenty-five dollars-plus. As soon as you learn to maneuver your star-figure around the reactor, the game will collect as much dust as Three Mile Island.

If you've a hankering for this kind of game, hold off until we get a chance to preview Fox's Games of the Century version of *The China Syndrome.* Hopefully, it won't be a duplicate of *this* loser.

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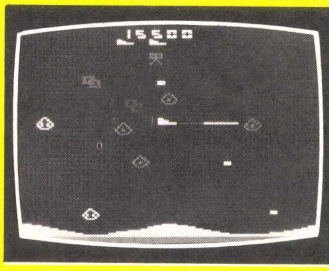

Look for our next issue (on sale May 24th), in which our dual reviewers offer their opinions of Telesys' new *Star Gunner* (left), *Killer Satellites, Amidar,* and two new *Tron* games.

focus on

Electronic Dungeons and Dragons

Fantasies once existing solely within the imagination enter the computer age.

by Rick Meyers and Randy Palmer

To leaf through TSR's *Dungeon Master's Guide* is a humbling experience. Thousands of heroes, wizards, monsters, natural phenomena, spiritual and physical states of being, magic spells and potions, geographical areas, injuries, illnesses, and weapons are catalogued.

Consider the possibilities. In a given situation, any or all of these elements can come into play with mathematically determined, yet constantly varying, degrees of impact.

The game is played with dice — six different kinds with up to eight sides — though there is no board, no figurines. The game has its own game time. A game can last for weeks or months ... all occurring in the minds of the players.

"It's almost a kind of participatory improvisational theater," says Dieter Sturm, spokesman for TSR, the makers of *Dungeons & Dragons*, the world's most popular fantasy role-playing game. "The participants sit around a table. One is designated the Dungeon Master. The Dungeon Master is really a game referee and a storyteller who takes the other players on an imaginary quest. They're going to find riches, but they are also going to come upon adversaries and obstructions which could be anything from monsters to mother nature herself."

The Dungeon Master is the grand coordinator of all *Dungeons & Dragons* game action. His narrative breathes life into a fantasy world the

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In our judgement, the greatest dragon ever to grace the movie screen is Vermithrax Pejorative, the maiden-fed monstrosity from the film, **Dragonslayer.** *Here, the worm swoops down on his wizard-enemy, Ralph Richardson.*

players must travel. Not only does the DM order and create the cosmos, he or she must also play the part of each and every person or creature that the players encounter. A DM may be called upon to portray a gate guard or an innkeeper, a merchant or a monster, an oracle or a madman — whatever the situation dictates.

Dungeons & Dragons is a product of TSR Hobbies, Inc., of Lake Geneva, Wisconsin. The company was founded in 1973 by Gary Gygax and Donald Kaye, who opened shop with $1,000 capital. Today, ten years later, that $1,000 has blossomed into an organization that boasts annual sales of more than $20 million — primary as a result of the sale of *D&D* games and game accessories.

Gary Gygax is the driving force behind TSR. It was Gygax's father who instilled in Gary a love of mythology and fantasy. Dieter Sturm relates, "As Gary grew up, he became enamored of science fiction and history. The first games he designed were war games: recreations of famous battles — everything from the Napoleonic to the World Wars.

"In the late 60's, he came out with a game called *Chain Mail.* That was a simulation game. This was at a time when he was frustrated with his Chicago insurance job. He had asked for a promotion, but he was told he'd have to move out of the city to get it. So he and his wife decided to see how far game designing would get them. Gary kept putting fantasy elements within his simulation games. All of a sudden he found people were writing to him and saying, "This is fun! We haven't seen anything like this before!"

In the formative years, the going was rough for TSR. Shortly after the company (originally Tactical Studies Rules) was formed, co-founder Donald Kaye died of a heart attack. That left only Gary Gygax as President, and Brian Blume as Chairman of the Board.

"Gary resigned his job in insurance to concentrate on the development of TSR," reveals Dieter Sturm. "He moved to Lake Geneva with his wife and five children and opened a shoe repair shop in the basement of his home just to support his family. Quite frequently the family would gather around the kitchen table, stuffing boxes, each with his own job, just to keep TSR going.

"The first product was *Dungeons & Dragons.* It took nearly a year for the first thousand of those games to sell. By the end of 1975, only four thousand official copies of the game were in circulation. Then, from 1975 on, it really took off.

"There was such a high demand so suddenly," continues Sturm, "that we were essentially working around the clock to get the orders filled. We moved from the small house to an old hotel. That provided several more floors for designing, writing, manufacturing, and shipping. From there we moved to an old van company until mid-1982, when we transferred to our new complex. Now there's a complete industry involved in producing accessories to these games. But at that time, they were basically just rule books."

Last year the *D&D* basic set sold approximately 750,000. Gygax and Sturm agree that what really started the ball rolling was the college campus crowd. "Once they discovered it, it circulated rapidly across the university grape vines," says Sturm.

Sturm estimates that there are three to four million *D&D* players in the United States alone. "But we also have offices in Canada, Great Britain, and Australia," he says. "We have a French translation and eighteen other countries are asking for translations now."

Gary Gygax explains the game's built-in appeal: "In *Dungeons &*

Continued on page 64

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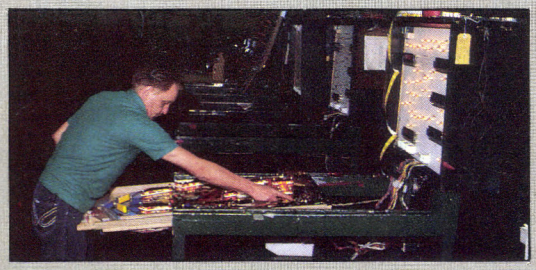
The dragon in* Dragonslayer *paused to grieve for its slain offspring before it sought revenge by devouring the youthful hero, Galen.



THE MAKING OF PINBALL MACHINES

How and Why Games Are Manufactured

by Richard Meyers

When last we left Joe Cicak, the president of Gamexxx — a Pennsylvania arcade game design house — he was telling us how videogames are conceived and manufactured. He was doing this grudgingly, because the people he designs games for have little use for Cicak's first love: pinball.

"I'm always told the same thing by the major manufacturers," he states. "'Boy, we'd love to build it, but we can't invest the money because we know we won't sell more than 5000 of them. The expenditure just won't justify the return.'"

Videogames and pinball machines are similar in that respect, at least. It takes hundreds of thousands of dollars, if not millions, to build and test just one design. No businessman worth his salt will want to spend that much on what he considers less than a sure thing.

Nowadays, pinball is considered less than a sure thing. "They can't compete with video head-on," Cicak confirms. "I don't think they'll die out, but we designers have to simplify, streamline, and come up with machines that are less expensive and easier to replicate."

Bally is doing its best to maintain the pinball industry by combining it with video techniques, as in their *Spectrum* game, and condensing the playfield, as in their *Baby Pac-Man* game. Gottlieb was the first to mount a videogame atop a pinball board and combine the playfields for their *Caveman* machine. Moreover, there is at least one designer trying to totally revolutionize the machines.

That man is Mark Ritchie, the designer of Williams' new *Thunderball* pinball game. "I've been working on this thing for almost a year and a half," he says. "I wanted to create a cleaner playfield, a new way of playing and a whole new way of launching the ball." His machine has no stick catapult on a spring, but a cannon that shoots the ball onto the flipper. A player has to have quick eyes and reflexes or the ball will be gone.

Since pinball is a more physical game than most videos, it may follow that pinball players are more aggressive and independent. That certainly is true of pinball designers. With the advent of videogames, they must fight an uphill battle to get their designs

Continued on page 74

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conquering:

MOON PATROL

ART BY ANGUS McKIE © 1983 BY YOUNG ARTISTS LIMITED

by Randy Palmer

At first glance, *Moon Patrol* appears to be simple. It isn't. The player is required to patrol the lunar landscape in a moon dune buggy, jumping over craters, boulders, barrels and other oddities while simultaneously destroying fleets of spaceships which drop bombs from the sky.

The patrol car is armed with a cannon which shoots vertically and horizontally at the same time. However, the horizontal fire is effective only for a short distance from the patrol car's cabin. Firing at an obstacle as soon as it appears on screen will not dispatch it; instead, the player must wait until it comes in closer to the car. Vertical fire is effective at any height.

Pressing the jump button will bounce the *Moon Patrol* vehicle into the air. Its time "in flight" is determined by its speed, which is controlled by the game's single joystick. The joystick allows for either slow or fast travel (left or right) as well as mid-level speed. There is no way to bring the patrol car to a halt.

Points are tallied as the player makes his way across the rugged terrain, with a bonus awarded each time certain points along the course are reached under "record average time" — generally eighty to one hundred seconds.

Play begins with the patrol car leaving base to make a circuit around the moon. As the player successfully completes portions of this beginner's course, which is divided by a series of letters, the action stops and *Moon Patrol* awards any bonus points earned.

When the player has completed a full circuit, the action shifts into a higher gear, and the course repeats at a more frenetic pace.

Overcoming the obstacles

Flying Saucers

Early into gameplay groups of flying saucers of various configurations will pursue the patrol car. Two types — the flat, yellow discs and duo-colored "hubcaps" — drop purple bombs which will turn the patrol car into a junkheap unless they are avoided or shot. The saucers usually appear in clusters of three each; first one type, then the other, although in later stages the player will be assaulted by combinations. Each kind can be destroyed by the patrol car's firepower but taking aim is difficult since the saucers tend to fly in erratic patterns.

When the saucers first approach from behind-as they always will-delay a second or so before firing, allowing sufficient time for them to creep in closer to the vertical axis of the patrol car. Several shots can be fired from the car at once, so don't be stingy with the ammunition. As the saucers begin to pass overhead, fire away. Three well-timed shots can do away with a trio of saucers in a blink. If the player manages to destroy a fleet before any drops a bomb, from five hundred to one thousand extra points are awarded.

The purple bombs which the flying saucers drop can also be shot away via the patrol car's aerial cannon, but they

are tiny objects and must pass along the car's vertical axis if they are to be destroyed in this manner. If a falling bomb passes through the axis without suffering a direct hit, pull the joystick to the left in order to decrease the car's momentum, thus allowing the alien bomb to fall harmlessly on the ground in front of it.

There is a third type of saucer which drops a different kind of bomb. These blue-gray entities appear as three spheres connected by a series of spokes, and also appear in groups of threes. They can attack alone or in participation with the other saucers.

Instead of bombing the patrol car, these saucers eject white bombs that fall to the ground ahead of the car, creating valleys or craters on impact. The "crater-creator" bombs cannot be shot away as can the bombs of the other saucers, since they are always pitched *in front* of the *Moon Patrol* car.

Either of the first two enemy types (disc and hubcap) will swoop in low and attempt to ram the patrol car if they are left alive too long. Try to destroy all while in the air.

Boulders, Rocks, Super-Boulders

Strewn along *Moon Patrol's* landscape are rocks and boulders of various sizes. Regular-size boulders can be blasted away with one shot from the patrol car's cannon; super-boulders require two shots.

Rocks lay at a very low level and can only be obliterated when the patrol car is level with the ground. Unfortunately, rocks tend to crop up on many occasions just after the car has completed a jump over a crater. When this occurs, slow the car down to avoid running into the rock, allowing the required split-second for the tires to settle onto the terrain again — *then* fire at the rock. If you're in doubt, the rock itself can always be jumped.

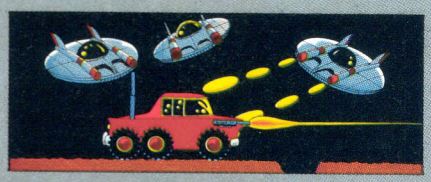
Occasionally rocks and boulders may appear side-by-side. Such a configuration would require two shots, of course. At other times, a boulder or boulder/rock combination will appear at the edge of a crater. In such a case, the player should push the joystick right to pick up speed before jumping, in order to clear the crater as well as the rock and/or boulder.

Land Mines

Liberally sprinkled across portions of the course are tiny, red land mines which look like small bricks. The land mines cannot be obliterated by firepower; they must be jumped.

Because the mines are set up in a basically haphazard fashion, successfully maneuvering around them requires a bit of practice. The player won't be able to maintain a constant speed during this phase of the game.

Approach the mines carefully, at a moderate speed. This will allow time enough to spot additional mines and make a determination as to the amount of safe area available between mines that the patrol car has in which to land. Allowing the car too much speed during a jump over a mine will automatically propel it into the next mine. Likewise, too little acceleration prior to a jump — or jumping too soon — may result in the patrol car not making it into the clear. It is preferable during this stage of the game to maintain a low-to-medium speed. Occasionally two land mines will lie next to each other. Accelerate prior to jumping a mine(s); decelerate while in mid-air to ensure landing in a safe area.



Rolling Barrels

As the patrol car reaches the uphill slope, barrels will begin rolling in from the right side of the screen. All barrels can be destroyed by firepower; but as with the boulders, barrels come in assorted sizes and can travel alone or with companions — as many as three in a row.

Fire at single barrels. Double barrels can also be eliminated easily with gunfire. Triple barrel (usually a combination of two small and one large), however, must be jumped. The player will always be able to dispatch at least the first barrel of a triple; possibly two— but never all three.

Rocket-Sled

The rocket-sled will always approach from *behind* the *Moon Patrol* car at ground level. When it appears it will remain a few inches behind the car, then speed up and ram the player's vehicle.

To avoid collision, wait for the rocket-sled to begin its acceleration. As it nears the rear of the patrol car, press the jump button to allow the sled through. Then, as soon as the car touches ground once again, press the fire button to destroy the rocket-sled, thus earning extra points.

Tanks

Tanks are stationary objects perched along the lunar terrain which fire thin, black bullets, and collision with either will destroy the patrol car.

Generally, two shots are required to dispose of tanks. Tanks fire their bullets as the patrol car approaches them. The first shot from the car's cannon will destroy the bullet, but only the bullet. A quick second shot is required to destroy the tank itself.

Tanks will be found not only along straight terrain, but also sitting on the far side of some craters. To avoid any mishap, fire continuously at tanks located on crater crevices. This will ensure that the player clears the area of any tank bullets. Build up speed when approaching the near edge of the crater so that when the jump button is depressed the patrol car will have enough momentum to clear both the crater *and* the tank.

Moon Monsters

Moon Patrol's multi-colored monsters (looking like escapees from a totem pole) are outlandish creatures living in hollowed out portions of the surface. Their wide heads rhythmically pulsate, rising above ground and thus creating an obstacle which the patrol car must jump over in order to survive.

When approaching a moon monster, use the joystick speed controller to time the car's jump. The jump should be made as the head is beginning to be lowered to ground level. Blasting away a portion of the creatures' heads is also feasible with cannonfire, and allows the player more room to work with when jumping the moon monsters' homes. Fire continuously when approaching their lairs; then jump when the car reaches the near edge. Since the monsters' lairs are the widest objects to be jumped in the game, high speed is necessary to clear the gap.

After you've successfully completed *Moon Patrol's* first course and collected a nice bonus, ready yourself for a faster, more furious pace with the second course.

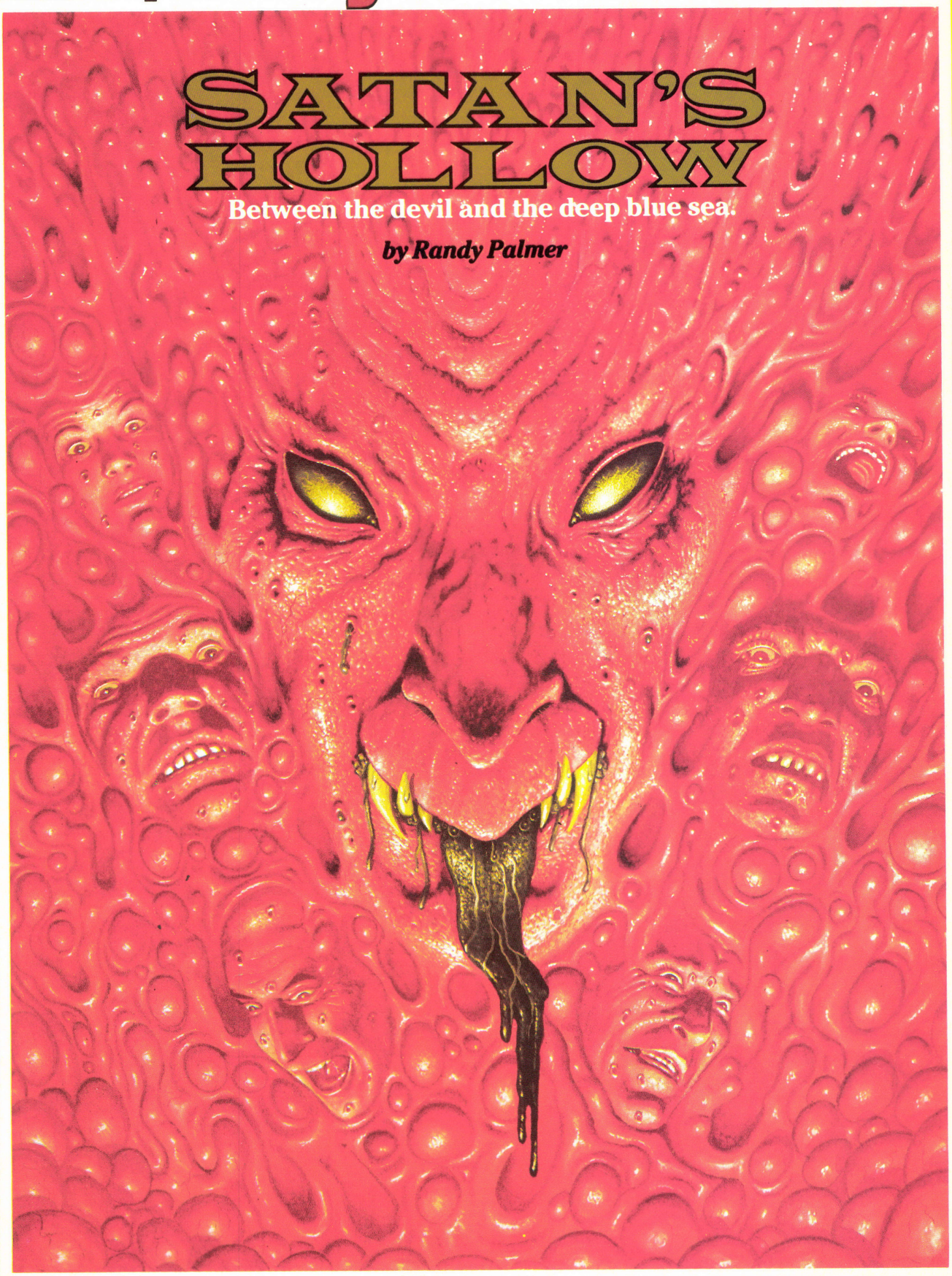
You can bring this article along, but you'll have to read it twice as fast the second time!

conquering:

SATAN'S HOLLOW

Between the devil and the deep blue sea.

by Randy Palmer



ART BY TERRY OAKES © 1983 YOUNG ARTISTS LIMITED

Bally/Midway's *Satan's Hollow* boasts some of the finest, fiercest graphics yet seen in an arcade game. Skies, against which swoop and dart the hellish gargoyles, change in hue as the game progresses, culminating in a pitch-black midnight backdrop that provides camouflage for the dark angels of hell.

In most arcades, which are suffused in deep space darkness, *Satan's Hollow* is a standout: its garish, blood-and-fire-kissed colors in the opening round and its shrill piping of Wagner's *Ride of the Valkyrie* are such to catch the eye and ear of the wandering player. Gameplay will ensure that the player comes back for more.

With the customary three-ship allotment, the object for the player is to destroy the flying, bomb-dropping gargoyles while building a bridge which, when completed, allows the player to cross over into Satan's Hollow. It is there that the player will battle Satan himself.

A Tron-like controller directs the lateral movement of the player's ship from one edge of the screen to the other. The built-in trigger is the only fire button at the player's disposal. On either side of the controller is a "shield" button which, when depressed, surrounds the player's ship with an impenetrable barrier.

As the game begins, two clusters of gargoyles — four in each cluster — will be circling far overhead. Move the ship to the left and fire at the left group. Only two shots at a time can be fired from the base ship. As soon as they streak off the screen or hit a target, two more shots may be fired.

Hitting a gargoyle is the only way to obtain a "building block" with which to begin construction of the bridge to Satan's Hollow. As soon as a gargoyle is destroyed, a piece of the bridge will appear in the lower lefthand corner of the screen. Move the ship to the far left to pick up the bridge piece and deposit it at the far right of the screen.

There is no need to cease-fire when moving a piece of the bridge. Fire at the gargoyles as you move the bridge piece. For every enemy destroyed, another piece of the bridge will appear at the left side of the screen. However, one bridge piece must be deposited before the next one can be picked up.

As soon as the first bridge piece is picked up by your ship, the gargoyles will begin their attack in earnest, dropping lethal bombs from the sky. These bombs cannot be shot away; they must be avoided — outmaneuvered through use of the controller-joystick. Alternately, the player may move "through" these bombs by shielding the ship with the protective barrier, which is activated when the Shield Button is depressed. However, the Shield provides only momentary protection (More on this later).

Once all the gargoyles have been obliterated, the player is awarded one flag, which is flown across the top of the videoscreen by a "friendly" ship. Don't shoot it! This flag is deposited on a hilltop at the right-top portion of the screen, and is worth 1,000 points. This occurs whether or not the player has successfully completed building the bridge below. Consider the bridge-building a separate chore in itself, while a flag is awarded for each set of gargoyles successfully eradicated.

"Satan's Hollow *boasts some of the finest, fiercest graphics yet seen in an arcade game.*"

After the first gargoyle-group is destroyed and the flag deposited, a new configuration of enemies appears on screen. Once again, for each gargoyle destroyed, a bridge piece becomes available for pick up. Once the bridge is completed, however, no new bridge pieces appear when a gargoyle is destroyed. The machine will sound off a signal, as of trumpets bellowing, to advise the player that the bridge is completed and can be crossed. The first bridge is comprised of just five pieces.

The player may choose to cross the bridge at this point and do battle with Satan; or may choose to remain in the realm of the gargoyles. This latter choice allows the player to continue disposing of gargoyle groups and accumulate more flags for each group dispatched. The more flags obtained *before* crossing the bridge, the better; for, once the player defeats Satan on the other side, bonus points are awarded at the rate of 1,000 per white flag, 10,000 per red flag. On the other hand, the accumulation of these flags becomes progressively more difficult, as the gargoyles become swifter and more deadly with each new configuration. However, with practice, anywhere from eight to a dozen flags (a dozen becomes one red flag and two white) generally can be secured without an undue amount of risk to one game-life. If the going gets too rough, the player can always "shield" his way across the terrain, providing the move is made deliberately and without hesitation, and end up in Satan's Hollow.

The Shield

The ship's protective barrier, activated by the shield button, is a precious device, very limited in duration. A timer at the bottom of the videoscreen displays how much shielding time the player possesses at any given moment. This time does *not* count in seconds, as one might expect. It is simply a gauge that runs from fifteen to zero.

The shield does not last long. Constant pressure on the shield button will "burn it out": the timer will hit zero within a matter of seconds. Obviously, then, the shield should be used *very* sparingly. Use it to scoot through bombs and groups of attacking gargoyles, or through the fiery breath of Lucifer, Old Nick and Beelzebub (see below). The ship should *not* be held in place when the shield is up; rather, it should be moved as quickly as possible to a safe (momentarily clear) area, with the shield in use *only* to move through attackers.

The shield will replenish itself as soon as it is deactivated unless the timer reaches zero and the ship is disintegrated by an enemy or enemy bomb. The timer will begin counting *up* rather than down, until it reaches its maximum of 15. It is important to note, however, that the longer the shield is active, the longer it will take for the timer to reach fifteen after use. For instance, if a player depresses the shield button for two or three counts, the timer will climb back to fifteen almost immediately. If, on the other hand, the player has used up, say, twelve counts on the timer, the shield function will be replenished at an agonizingly slow rate.

Lucifer, Old Nick & Beelzebub

Periodically, between sets of gargoyles, the player will be faced with another of the devil's many guises: the fire-breathing visages of Lucifer, Old Nick and Beelzebub.

These three are disembodied heads that float in various patterns across the sky, belching columns of flame

Continued on page 68

golden pons

Test Your Videogaming Knowledge.

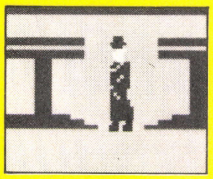
1. Listed below are videogame creatures, places, and people to match with the names of the games.

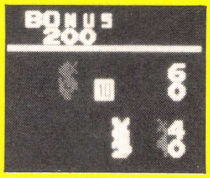
Megalytes	*Flash Gordon*
Spinners	*Raiders of the Lost Ark*
Nitro Ed	*Star Voyager*
MACC	*Zaxxon*
Zakor	*StarMaster*
Mobots	*Astroblast*
Tanis	*Encounter at L-5*
Spider Warriors	*Gangster Alley*

2. We've taken the letters of home games and created new words out of them; all you have to do is put them back together, unscramble them, and provide the one-word videogame title. Hint: four of the games are from Atari, one from Activision, one from Intellivision, two from Odyssey, two from ColecoVision, and one from Imagic. Note: the words are *not* clues to the games. None is generic, ie *Baseball* or *Tennis*.

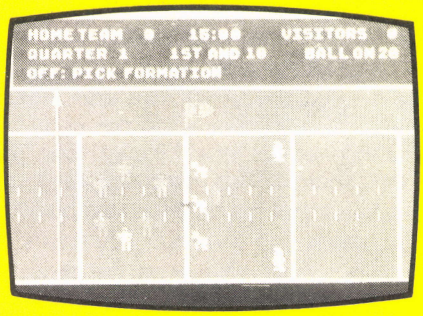
STORE SAID
REND FEED
DEEP MATS
FUN AS
PUNS MARE
PICK NOAH
THESE MINERS
TIDE PENCE
BALD GUY
POUR MEATS
TAIL ANTS

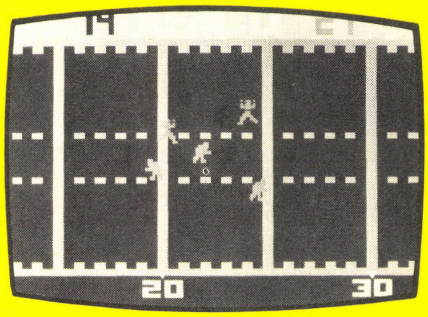
3. Identify the Atari home game (left) and ColecoVision game from just a portion of their screens.

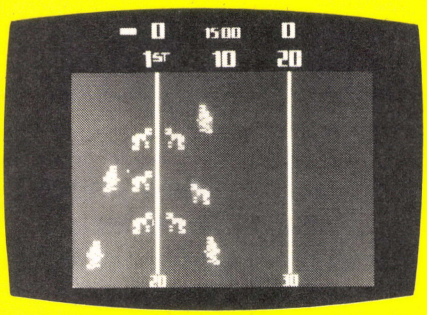


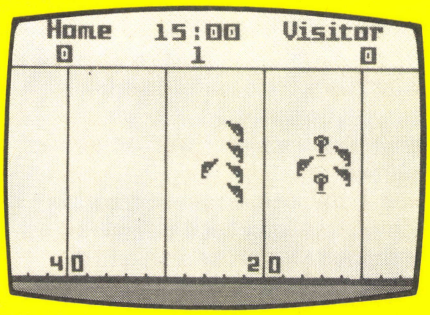


4. So, you think you know football games? Okay, then: identify the following four gridiron videogames based solely on their screens. Hint: two are from Atari, two from Mattel.









5. The following sentences contain home videogame titles hidden phonetically. For example: "He put his axe on the shelf" conceals "... s axe on ..." or "Zaxxon." This time out there are two from Activision, one from Imagic, one from Parker Brothers, and one from Intellivision.
   a. "It's *my* crow, sir; generally, I allow it to fly where it desires."
   b. "I tend to overreact, orderly, when patients are not carefully attended!"
   c. "Knights: talk or fight, but don't do both!"
   d. "I watch opera; come and enjoy it with me."
   e. "Old rags torn to pieces make great kit tails."

Answers from last issue:
1. *Othello* to *Outlaw* to *Warlords* to *Snafu* to *UFO*.
2. Krybor: *Demon Attack*, Alpha Ro: *Cosmic Ark*, Spectra: *Planet Patrol*, Dratpillars: *K.C.'s Krazy Chase*, Electrosauri: *Space Cavern*, Recognizers: *Tron*, Enarc: *Pitfall*, Zardon: *Missile Command*, Grundle: *Adventure*, Bonker:, Baiters: *Defender*, Rainbow Bubble: *Word Zapper*.
3. *Berserk, Hangman, Outlaw, Freeway, Utopia, Kaboom, Pitfall, Venture, Logix.*
4. *Space Invaders*
   Laser Blast
   Zaxxon
5. *Riddle of the Sphinx*
   Fishing Derby

facetiae

The column which dares you to identify three popular home videogames based on the following verse.

I
"That's that," an expression we
All use at certain times.
Here, however, with the
Game protagonist it rhymes.

II
This game sure has lots of heart,
As one bold hero darts
From floor to floor to save a tart
And gather lots more hearts.

III
Ruling the world sounds pretty
Fine; your will would be supreme.
This game shows the nitty
Gritty problems of that dream.

Answers: I: The Empire Strikes Back, II: Beauty and the Beast, III: Utopia,

input

Our readers write.

Your article on Don Imus in the February issue stirred me to write.

Don Imus claims that videogames don't shrink his radio audience. Well, after he has called us "fruitballs" and "homosexuals" for enjoying our hobby, I don't believe he has to worry about us listening to his stupid program.

To downgrade the designers that created *Joust, Tempest,* and *Frogger,* to name a few, is appalling. It took a lot of imagination to create these masterpieces.

Some people are unable to play sports because they are handicapped. These people can now at least play a simulation of football or baseball with a friend through the use of this new technology ... and Imus is calling these people "fruitballs." It is feasible that Imus was using light-hearted humor; but I would call it downright cruel.

You are here, I believe, to support videogames. So why print this anti-videogame garbage? And why do you ask movie stars what they think of videogames? You must know that there is competition between movies and videogames; the games take a large chunk of revenues out of the theaters. Seven out of ten of these movie stars are naturally going to hate videogames.

Work toward the betterment of videogames. Imus-type articles give the Surgeon General his ammo.

Rod L. Massman
Lima, Ohio

1. Joust *et al are fine games, but "masterpieces" is a term that history reserves for works which live up to the weight of its judgment.*
2. Most movie stars we've talked to love videogames.
3. Our magazine explores all facets of the videogame phenomenon, not just those aspects which please us. We will continue to do so.

Congratulations on a fine magazine. I am a game nut. I love games of all kinds, and that includes videogames.

I don't know why some psychologists denounce the effects of videogames, but when you're my age (fifty-eight) you see the full cycle. As a kid, I was told that Bugs Bunny was too violent, that cartoonery was bad for the whole generation's mental health. It was bull then and it's bull now.

I have been an educator and in guidance of young children for thirty-plus years. I have worked with many youth groups and find their interest in videogames quite healthy.

Personally, I think that videogames have a therapeutic effect. When I experience pressure on my job, or at home, the greatest release I can find is to play some frenetic and fun-filled game. After fighting the alien space ships and dodging some bombs, the problems that I was so concerend about earlier have dissolved in a pool of sweat.

I and my cartoon-addicted friends of old have not been adversely affected by the violence in Bugs Bunny. I really object to the so-called experts who want to tell me how to run (ruin?) my life, and those of my children. An interesting point: not a single one of the "troubled" kids that I work with spends any time fighting aliens in front of a TV set. And another: videogames have proved greatly useful and fun for invalids and others confined to the Senior Citizens' Home.

Keep up the good programming. I especially like your in-depth cartridge reviews much better than the other magazines I read.

George Cipolletti
Director of Guidance
Schuyler-Colfax Junior High
Wayne, N.J.

Please help me. I want to contact all the videogame manufacturers, those that make the hardware, the cartridges, and the arcade games as well.

I recently designed a new videogame and I would like to send it to these people to get some advice on modifications, marketability, and so forth.

Could you please list for me the addresses of all the major videogame manufacturers?

Gilles Roy
Aylmer, Quebec

How To Master Video Games, *a book from Bantam Press, has all the addresses you need.*

I've got problems. I've had my Odyssey 2 game system for more than a year, and up to about a month ago it worked fine. But recently my left joystick went on the blink.

Some Odyssey units have detachable joysticks, but mine doesn't. My local stored referred me to a number in New Jersey. When I called there I was told to send my joystick and ten dollars and they would fix it. I hung up in confusion.

I have six cartridges and unless I get my game fixed I'm stuck with useless cartridges and a busted unit. What do I do?

Jason Holly
Narragansett, R.I.

You have two choices, Jason. You can order a new joystick from the address below or send the entire unit there, to be serviced. Jeff Leitz at Odyssey recommended that you send the entire unit, and that you not attempt to detach the joystick yourself, the reason being that that portion of the unit is susceptible to static discharge. "You can zap a chip," said Mr. Leitz. The Odyssey service center in your area is located at 180 Manor Road, East Rutherford, New Jersey, 07073.

In the Input section of your fourth issue, Gerry Macinelli said that he didn't understand *Tron,* and you said that you'd be happy to send him a complete run of *Tron* comic strips.

Would it be possible to send me some? Although I wasn't too confused, I would appreciate them as a collectible.

Russ Perry Jr.
Omro, WI

We were just kidding, Russ. No kidding. (Editor's note: some of you may have noticed that the promised third chapter of Rick Meyer's murder mystery User Deadly *does not appear in this issue.*

Due to contractual difficulties, User Deadly *will not be continued in the pages of* Videogaming Illustrated.

Those of our readers who cannot live without knowing how the murder was committed, and how the ace — but eccentric — detective solved the mystery ... those readers can send Videogaming Illustrated *a self-addressed stamped envelope and we will send you the solution.)*

championship videogaming

A Column of Tips and Trivia From Our Readers.

SUPER-ZAXXON
There's no reason even to attempt this game unless you're already good at Zaxxon. Look *ahead* on the screen rather than at what you are firing at; otherwise you're sure to crash into the walls.

— Larry Toine

CENTIPEDE
Let the fleas fall ... they make a 'wall' that you can line the gun up with; when the Centipede hits the wall, you can pick off each segment, in order, thereby scoring more points than usual.

— Jacky Jr.

TEMPEST
Concentrate on the flippers. Stay away from lanes with spikes. A bomb can rush up a spike faster than one coming from an enemy in a non-spiked lane.

— Denny Turner

STARGATE
Use the Inviso sparingly. It's not needed, really, except during every fifth wave, or if the planet blows up. Save the Smart Bombs for every tenth wave to get rid of clusters of Firebombers.

— Freddie

SCRAMBLE
To bomb the base, you have to go all the way down the cavern. Your ship will crash, but it doesn't matter because you've completed the mission.

— Terry M.

MOON PATROL
There's no reason not to fire all the time. Since you can't look at both the sky and the ground at the same time, continual fire will get rid of most of the rocks.

— Tom Moore

ROBOTRON 2084
After about wave eight, don't worry about picking up the humans except during the brain waves; otherwise you're putting your man in jeopardy.

— Bob Consigli

VIDEOGAMING
AND COMPUTER GAMING ILLUSTRATED
READER POLL

Our readership is growing with every issue. Accordingly we want to 1) thank you, and 2) find out as precisely as possible who you are.

Not coincidentally, the field of video and computergaming is growing at a phenomenal rate. The number of hardware and software manufacturers, and the variety of their products, is staggering.

If we are to make *Videogaming Illustrated* the best magazine it can be; if we are to deliver the kind of information and entertainment that you want to read, we have to hear from you. So please fill out the form below.

Return your form to:
Reader Reply Poll,
16 Sutton Place
Staten Island, N.Y. 10312

Sex: ☐ Male ☐ Female

Age: ☐ Under 13 ☐ 13-15 ☐ 16-17 ☐ 18-21 ☐ 22-24 ☐ 25-28 ☐ 29-33 ☐ 34-38 ☐ 39-43 ☐ 44 and up

Combined Household Income:
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☐ $10000-14999 ☐$15000-19999
☐ $20000-24999 ☐ $25000-29999
☐ $30000-34999 ☐ $35000 plus

Marital Status:
☐ Single ☐ Married

Number of Children:
____ Ages under 3 ____ Ages 3 to 6
____ Ages 7 to 11 ____ Ages 12 to 17
____ 18 and over

How many hours do you and/or your family play computer or videogames in one week? _____

How much money per month do you and/or your family spend on computer software? _____

How much money per month do you and/or your family spend on videogame software? _____

How much money in an average week do you and/or your family spend in an arcade? _____

Do you own a home video unit? ____
What brand(s)? _____

Do you own a home computer? ____
What brand(s)? _____

Do you plan to purchase a home computer in the next two years? ____

Please rate the following Videogaming Illustrated *Features from 1-Poor 2-Fair 3-Good 4-Excellent:*
Keyboard (editorial) ____
Eye On ____ Fiction ____
Supergaming ____ Cinema ____
Conquering (player strategies) ____
Preview (cartridge reviews) ____
Arcadia (arcade features) ____
Meet the Original ____
Print Out (book reviews) ____
Computer Eyes (computer hardware news and reviews) ____
Ramblings (computergame reviews) ____ Star Words ____
Golden Pons (puzzles) ____
Facetiae ____ Video Victor ____
You Read it Here First ____

List the titles of your favorite home videogames:
1. _____
2. _____
3. _____

List the titles of your favorite home computer games:
1. _____
2. _____
3. _____

List your favorite arcade games:
1. _____
2. _____
3. _____

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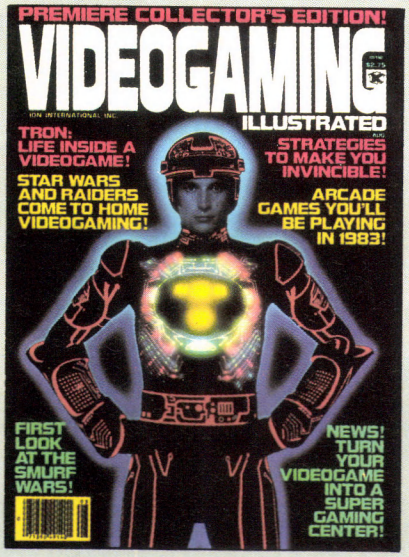
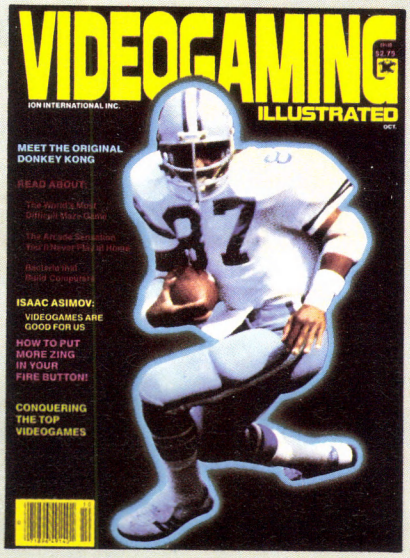


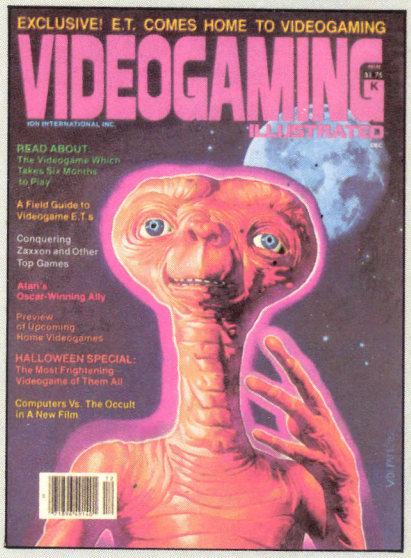
ISSUE #1

- *Tron:* how the movie was made, with seven pages of breathtaking color photos.
- The big arcade flops of 1982.
- Jim Levy, the president of Activision, throws hearts and daggers at the industry.
- How to hook your videogame system to your stereo amplifier for window-rattling sound effects.



ISSUE #2

- A gridiron superstar looks at football videogames, and tells why he opened an arcade.
- Science and science fiction author Isaac Asimov talks about why videogames are good for us.
- Conquering *Space Cavern, Pick Axe Pete, Space Battle, Donkey Kong,* and *Turbo.*
- How computers work.

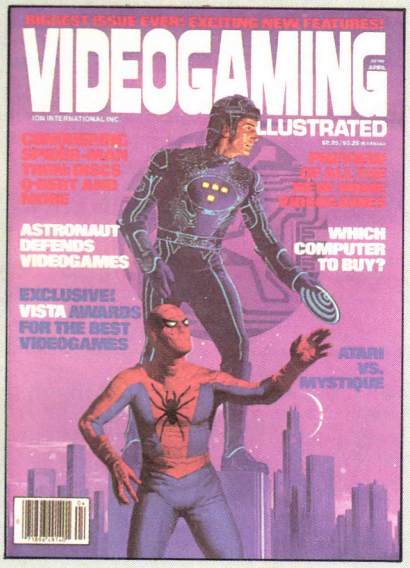


ISSUE #3

- A look at all the home videogames featuring extraterrestrials.
- What happens when computers are used to serve the occult?
- An interview with an Oscar winning actor who has an unusual relationship with Atari.
- How videogames are developed and manufactured, from concept to program.

ISSUE #4

- The story of the *Star Wars* saga, on film and in videogames, including a penetrating interview with the man who plays Darth Vader.
- An interview with radio's Don Imus, the most irreverent figure in the history of the medium — and avowed hater of videogaming.
- Conquering *Cosmic Creeps, Atlantis, Kangaroo,* and *Dig-Dug.*



ISSUE #5

- A profile of Stan Lee, the creator of Spider-Man.
- Conquering Tron, Spider-Man, Q*Bert, and Slither.
- A space shuttle astronaut discusses computers in space . . . and videogames on earth.
- A lawyer explains how to protect your videogame program.

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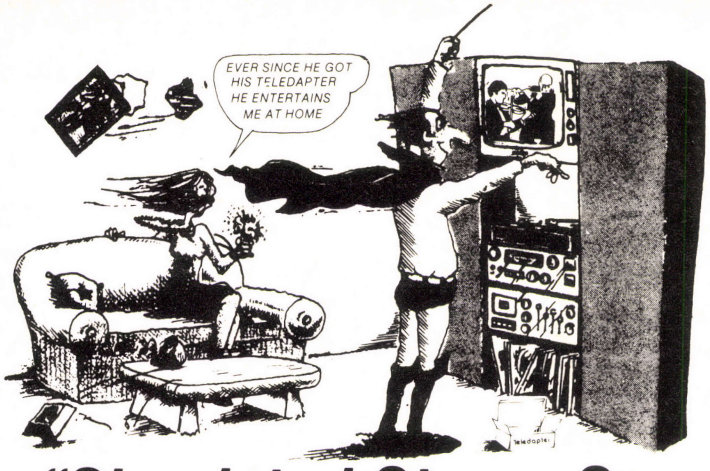

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*WAY NO. 1

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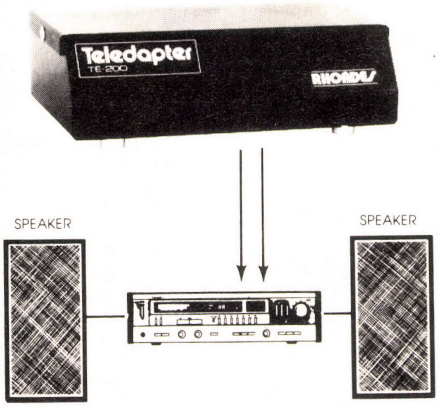

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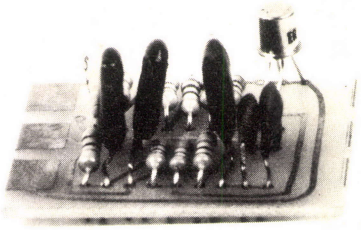

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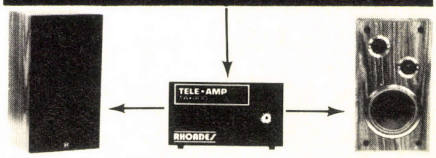

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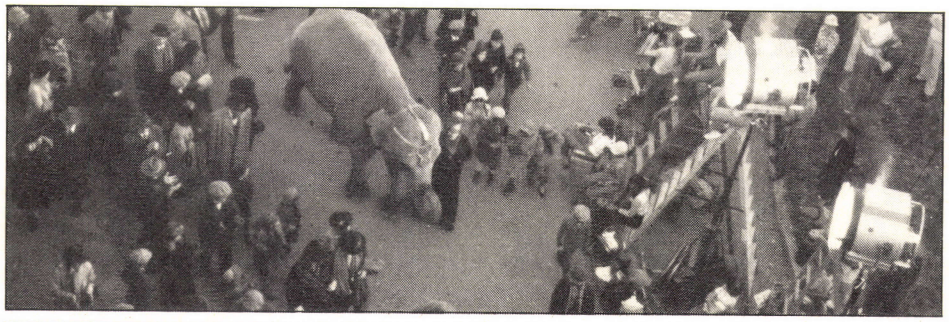

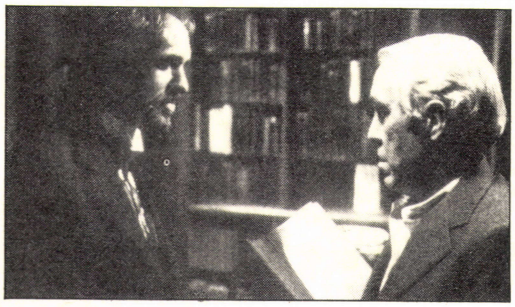

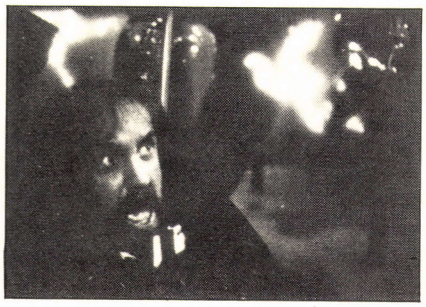

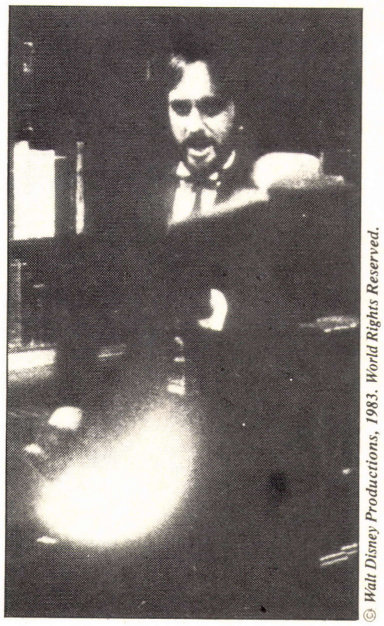

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BRADBURY

Continued from page 14.

and I Sing the Body Electric. *Do you prefer one medium to the other?*

RB: The best work has been on TV, and recently. *I Sing the Body Electric* and also, *Any Friend of Nicholas Nickleby's Is a Friend of Mine.* Did you catch that last year? Fred Gwynne played Charlie Dickens for me and he was just beautiful. So I had two wonderful things last year plus a third which Home Box Office has had on called *All Summer and a Day* directed by Ed Kaplan for the Learning Corporation. And it's so good that Warner Brothers is sending it out as a second feature in movie theaters even though it's only a half hour long. They're trying to get it nominated for an Academy Award. They put it in local theaters a week before Christmas in order for it to qualify. The year before that was dreadful because of *The Martian Chronicles.*

It was a bore. It was a colossal dead elephant standing there in the middle of the desert. And it wasn't even properly stuffed. The director got up every morning bored and didn't do a damn thing with the film. He didn't direct anyone, that was for sure. Anyway, I'm getting all the rights for these things back. I have the rights to both *The Martian Chronicles* and *The Illustrated Man* back. Eventually I'll do them all over and do them right. *Fahrenheit 451,* of course, is a lovely film. I'm very pleased by that. Very evocative, very haunting, very sad.

VI: Just like the book.

RB: I always cry at the end because the combination of the book people walking in the snow and the music of Bernard Herrmann is so touching. Very, very lovely. It's the essence of the book, and that's what you want. I'm willing to put up with changes in my work if the changes have the essence.

VI: Well, we've discussed computers, videogames, movies and television. Now let's touch on your particular area of expertise: books. With all the dehumanizing factors of the 1980s, do you feel that great science fiction is a thing of the past?

RB: Every age of literature is its own age. I'm not sure that what you have asserted is quite true. It's hard to nail down. I just think we were lucky to have in our time such talents as Robert Heinlein, who certainly encouraged me. When I was nineteen and he was thirty-one he used to allow me to come up to his place to look at the things he was doing. He was one of the first 'human science fiction' writers — all of his early works, especially. Henry Kuttner was the same way. He introduced me to John Collier and of course I already knew Thorne Smith when I was a kid. So you get a mulch of all these writers in your system.

VI: Today, however, many fear that children are playing videogames rather than reading.

RB: With a lot of science fiction writers, you have the same phenomenon that you observed with your videogames. The history of men is the history of toy invention. Creating games and solving those games. Creating alien civilizations and solving those civilizations is a kind of game playing too, isn't it? That may be one of the reasons you are seeing more alien science fiction and less human science fiction. But I don't play those kinds of games. I'm interested in human beings and human problems. But men being what they are genetically, they are going to play those games.

VI: Can we expect another Bradbury book soon?

RB: I'm finishing a murder mystery right now. I've been working on it for eight years. I'm a huge lover of Raymond Chandler, Dashiell Hammett and Ross MacDonald. I loved them forty years ago, before all the intellectuals jumped on the bandwagon. How come intellectuals don't know how to love? Where were they forty years ago? I discovered those mystery writers, loved them, and knew that they were excellent. That's the difference between those who think their way through books and those that feel their way and fall in love.

VI: What advice do you have for the beginning writer other than reading and loving great books? Is there a way to separate yourself from the game players of life?

RB: You find out what's wrong as you go. You become your own student. No one can help you at that. If you write every day of your life, you'll learn. You won't need any help. So I don't believe in criticizing most things.

VI: Except George Plimpton.

RB: That's different! As Truman Capote once said, 'He's not a writer, he's a typist.' Oh, George, here we go again.

computer eyes

SPECIAL "K'S"

What's a "K" and how does it determine which computer you buy?

by Martin Levitan

People are always talking about it, slinging the letter around in conversation.

"Oh, this little number has 32K."

"I can upgrade *my* computer to 48K."

You sit there, nodding, acting impressed, afraid to admit the truth — that they might as well be addressing you in Aramaic, since all you know about a "K" is that it has something to do with the inside of a computer.

Then again, maybe it doesn't.

Then again, you wish someone would just take you by the hand and explain the whole bloody thing from the very beginning.

Which is exactly what we're going to do.

What is a "K"? How did it set into the computer, and what's it doing in there?

It all goes back to the fact that human beings possess ten fingers.

When people began to use numbers, they knew only one way to work with them: to count. The most forthright and therefore most common approach was to use the fingers. Expanding this capacity by employing the toes did not gain favor, shoes having been a factor. It was a bother taking them off. Thus, we came to deal with numbers in parts or multiples of ten fingers.

Little by little, people discovered how to add, subtract, and multiply; but this was slow work using ten digits. By the time he multiplied eight melons by seventeen shekels, a merchant might well see his produce rot. Thus, in some countries, special devices were invented to make computation easier, especially in dealing with large numbers.

The Romans used a counting table, or abacus, in which units — fives, tens, and so on — were represented by beads. These could be moved in such a way that when you had accumulated ten beads in one column, you jumped to the next column where *one* bead represented those ten.

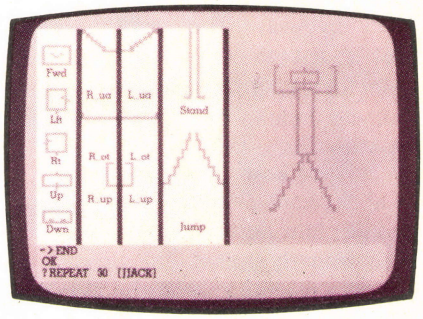
Seventeen would thus be a "ten" bead and seven "one" beads. Repeating that eight times — shifting to the "ten" column each time you accumulate ten "ones," and sliding a bead to the "hundred" column when there are ten "tens" — gives us one "hundred", three "tens" and six "ones." One hundred and thirty-six. How convenient!

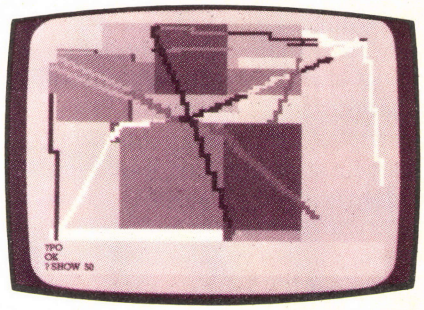
Jumping through time, the Industrial Revolution saw many attempts at mechanical computation machines, most using the base of ten. As recently as the late 1940s and early 1950s, the first primitive "electronic" computers attempted to use decimal base arithmetic — i.e., fractions or multiples of "ten" — for their computations.

However, these old electron tube devices needed too much memory to deal with the number ten. That is, there were too many "beads" to move around electronically (the columns of beads, in this case, being columns of switches). The solution was to change number systems to take advantage of the fact that machines exist in two natural states: on and off. This numbering system is called binary, for two.

The smallest amount of information

Mattel has ambitions of grabbing a portion of the home computer market. Shown here is their new Aquarius computer with its expandables: a printer, data recorder, computergame unit, and memory expanders.





a computer could handle was a "bit" or binary integer; a "one" (switch open) or a "zero" (switch closed). To represent larger numbers more bits were needed. What we know as the numbers 0,1,2,3,4 in finger notation became 0,1,10, 11,100 in binary.

Why those particular combinations? Obviously, you can't have "three" and "four" both represented by "11". So, if we're limited to ones and zeros, the arrangements cited above are the simplest next-step-up from the one before it.

Switch closed: zero.

Switch open: one.

Open-shut combination: two. And so on.

All lightning-fast.

Being the smallest piece of information a computer can handle, a bit by itself isn't too useful. However, eight bits combined into one "byte" can be used to represent any number, the letters of the alphabet, punctuation, and even graphic characters.

These strings of eight bits are used to arrange groups of circuits inside the computer. Hence, when you put in your cartridge or disk on which the arrangement of bits is stored, the computer circuits read the road map, snap-to, and flash the information of the screen.

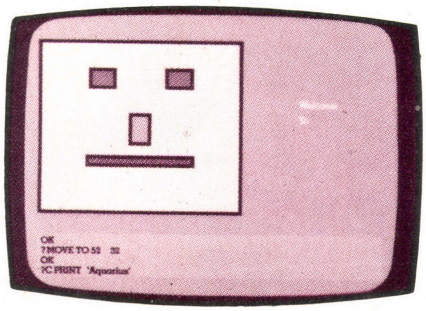
Each location can store a certain number of bytes. The number of bytes which can be stored defines the computer's power or "memory." If your machine can hold 64,000 bytes — give or take a few hundred — this is referred to as 64K bytes of memory.

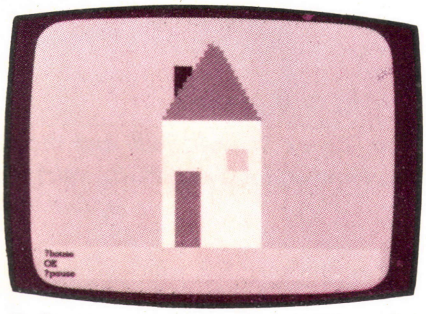
"K" is simply a scientific notation that tells you to multiply whatever number is to the left by one thousand.

Let's go through that one more time: since there are eight bits for one "byte", a computer memory that can store 8,000 bits can also be said to store 1,000 bytes, or 1K byte. A computer program is, again, merely a collection of bytes which cause a computer to perform a particular task.

It is not necessary to know more than a few simple facts about all this bit manipulation and byte-counting to judge the amount of working memory a computer will need for your home use.

One byte (eight bits) of disk space or main memory is required to store one letter or symbol. A typewritten page holds on the average of 250 words (1500 characters and spaces). It would take 1,500 bytes (12,000 bits) of com-





***Software programs for children for the Aquarius computer include tutorials in math and spelling. For the present, adult-oriented programs are concerned with home management, including* Hints From Heloise.**

puter space to store one page as computer code; therefore, it takes 1.5K bytes of computer space to hold one typewritten page in main memory, 30K bytes of computer space to hold twenty typewritten pages.

As we discussed at greater length in issue two, the working memory of the computer is called RAM — random access memory. That means you can influence what happens on the screen, as opposed to read only memory, or ROM.

RAM is measured in thousands of bytes or K bytes. The amount of RAM you need depends upon the programs you plan to run.

Most game programs, even the sophisticated chess and adventure games, will run comfortably with 16K bytes of RAM. Many simple utility programs, such as personal finance, and meal planners are also designed to run on 16K bytes.

In choosing or designing a computer system, whether for home or office, the most important consideration is the human interface. If a system doesn't work for the user, it's not an effective system, regardless of how many "Ks" there are.

We examined the TS1000 in our last issue and found it a good if simple beginner's tool. Now that you've met the elusive K, we continue our look at "user friendly" personal computers with two other new units now on the market. Both boast more "K" than the TS1000; let's see what that means for you in a practical sense.

From Mattel, the folks who brought us Intellivision and M Network, comes a new entrant to the home computer race. Using the same marketing approach that revolutionized the toy industry and has been copied by every manufacturer since, Mattel will field the Aquarius home computer.

What marketing approach is that? The add-on philosophy! First, there was Barbie, then clothes for Barbie, then Ken for Barbie, then clothes for Ken, then a house for both.

For three years Mattel had been planning to bring out a computer keyboard for its Intellivision console. It finally test marketed a keyboard last spring. The perfected unit, and other peripherals, will be on the market soon. In the meantime, however, Mattel developed another product to which peripherals could be added: the Aquarius basic unit.

The retail price for that basic unit is approximately two-hundred dollars. Only some of the popular Intellivision videogames will be made available in the Aquarius format; the cartridges will not be interchangeable with other systems.

You can purchase the 13 x 6 inch Aquarius "starter" unit, complete with the forty-nine digit moving-key keyboard — as opposed to the flat "membrane" surface of the TS1000 — without buying any other attachments.

As you become more familiar with the keyboard and the various functions of the basic unit, you can then decide which peripherals to add to the system.

The basic unit features 256 different graphic characters — numbers, letters, etc. — as well as sixteen colors. It has a built-in 4K byte capacity, but has a variety of different expanders that permit an eventual byte capacity of 52K.

The initial peripheral units being placed on the market for this system consist of the Aquarius data recorder for program storage, which is essentially a matching audiocassette player.

Then there's the Aquarius printer, which is capable of printing 256 characters — including upper and lower case letters, numerals and special graphic characters. Like the recorder, the printer is attached directly to the

Aquarius console without requiring additional interfaces. An extremely quiet unit, the printer allows "screen dumps," the reproduction of graphics — not just text but pictures — in the exact configuration they appear on the television screen.

The Aquarius Mini-Expander allows simultaneous use of both a videogame cartridge and an Aquarius memory expander cartridge. It plugs directly into the cartridge port and, once in place, provides the user with instant entertainment in the form of game cartridges in Aquarius format.

The Mini-Expander comes with two hand controllers, each boasting a sixteen position disc and six action buttons.

Four basic types of software are available for Aquarius:

Entertainment

The Intellivision game themes which are being duplicated in the Aquarius format include: *Astrosmash, Snafu, Tron: Deadly Discs, Football, Lock N' Chase,* and *Advanced Dungeons & Dragons.* There *will* be more, since videogames remain a strong selling point for computers.

Education

The educational programs for children will include *Math and Mazes* and *Spelling and Space.*

Home Management

These programs include *Finform,* an electronic sheet to keep track of household finances and serve as a forecasting tool; and *Fileform,* which allows users to perform a multitude of text-oriented tasks in the home, from maintaining lists to compiling information.

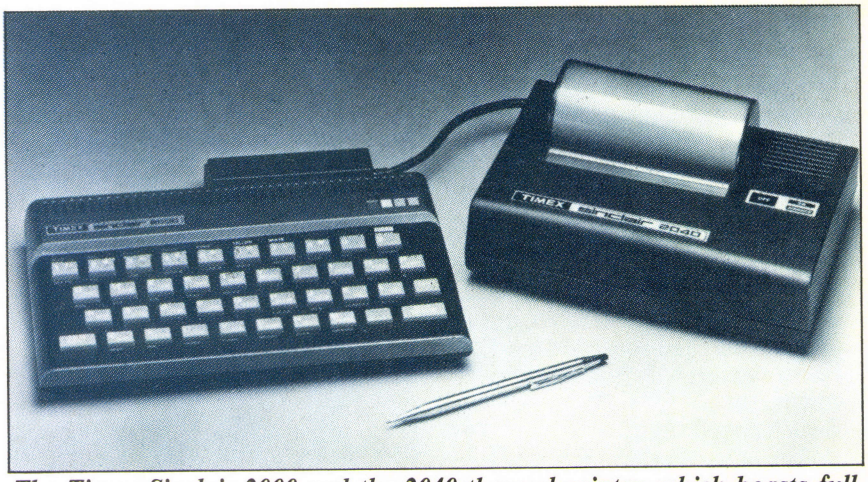
Self-Improvement

Programs in this category include such subjects as a guide to personal nutrition, a course in speed-reading, music composing and appreciation, and a typing tutor.

The financial community has said of Mattel that they must shift from being a toy company to being a company which specializes in sophisticated electronics.

Mattel has come up with a friendly and inexpensive entry into the home computer race. While there is nothing particularly *innovative* about this Mattel product, it's a solid tool for the purposes described above.

Speaking of inexpensive, Timex is still the uncontested ruler of lowcost computing. Their latest effort is the



The Timex Sinclair 2000 and the 2040 thermal printer, which boasts full graphics and text capability, thirty-two column width, and a printing speed of two lines per second.

Timex Sinclair 2000, which is designed to replace their blockbusting TS1000 (see last issue).

This 48K computer carries a suggested retail price of under $200 and features high resolution color graphics, programmable sound, and a movable key typewriter-format keyboard.

A 16K version of the computer will have a suggested retail price of $149.95.

At those prices, Timex and their British partners will sell a lot of hardware, just as they did the TS1000.

With more memory and different styling, the TS2000 will win it a wide following. Also in its favor: the machine is compact and lightweight, measuring 9 1/8 x 5 5/8 x 1 1/4 inches and tipping the scales at an ethereal twenty ounces.

On the debit side, it may be just a *bit* too compact for adult-sized fingers to comfortably use the typewriter-style keyboard.

In one area, however, the manufacturers must have been listening to the collective user muse: their software comes in the form of mini-cartridges. Small enough to fit in the palm of the hand, they plug directly into the computer. This does away with the need for a cassette tape recorder as an input device.

The suggested retail price for the cartridges will be under twenty-five dollars.

The home cassette route is still available for storing and loading your own programs and data, to which end Timex has also addressed the earlier problem of sluggish tape loading. The TS2000 allows the user to load and save up to 16K of memory in approximately one hundred seconds. That may not be quick by Apple/IBM standards, but it's not bad for one-tenth the pricetag.

Timex has also announced a thirty-two column dot matrix printer. Compatible with both the TS1000 and TS2000 personal computers, it will retail for $99.95.

And hark, computer music lovers: Timex hasn't forgotten you either. The fully-programmable sound capability of the TS2000 is provided by a built-in loudspeaker with a range of ten octaves and 130 semi-tones. A "beep" command capability permits the user to set variable pitch and duration, making it possible to compose music with each keyboard stroke.

Initially, over forty Timex software programs will be available for the TS2000, offering users convenient application from business and personal financial management to education and entertainment.

Timex plans a number of add-on peripherals in coming months, including a communications interface device or "modem" which will allow users to plug Timex computers into standard telephone equipment for direct access to computer data banks and telecommunications services the world over. (This will allow computer users to exploit home shopping and banking services as they become available.) Consult your local dealers for further information.

So — that's what all those Ks can do for you. Next issue, we'll take a look at what Atari is doing with *their* Ks, and discuss BASIC plus a few other computer languages you've been hearing — and wondering — about.

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Which player's score is about to take flight?

Quick, figure it out. Here comes Phoenix* from Atari.

Duck. Here comes Phoenix. The famous arcade sensation that's now a home sensation. And it's only from Atari for use with the ATARI® 2600™ and Sears Video Arcade† systems.

This is a spectacular arcade replica. With four waves of awesome warbirds. Flapping wings that grow back seconds after you shoot them off. And even a forcefield.

But in Phoenix you can't just wing it. You can't shoot like the player on the left. Because he'll get only 100 points for a bird high in the sky. While the player on the right will shoot the same bird low in the sky for 500 points. And a feather in his cap.

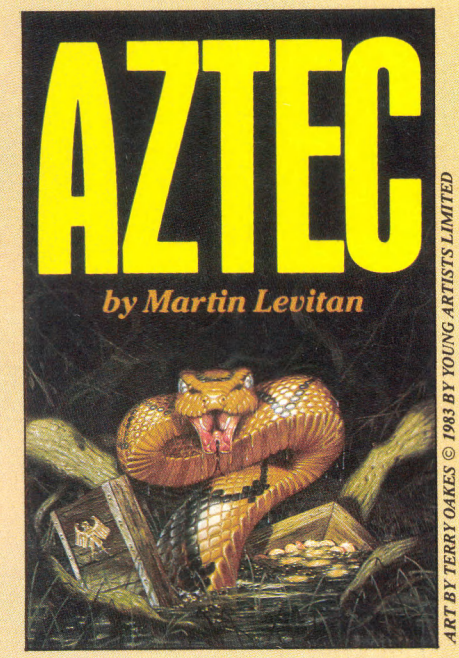
So whether you aim high or low, aim to get Phoenix home. Any other idea is for the birds.

ATARI

A Warner Communications Company.

AZTEC

by Martin Levitan



ART BY TERRY OAKES © 1983 BY YOUNG ARTISTS LIMITED

Your mission, should you decide to accept the challenge of the millennium is to find the fabulous Golden Idol, hidden by the now-extinct Aztecs within a mysterious lost pyramid.

Others have gone questing for this priceless Golden Idol, but have not lived to tell the tale. In particular, eccentric archaeologist Professor Von Foerster is rumored to have actually *located* the pyramid but fell, inevitably, before the fierce and terrifying monsters, immortal Aztec guards, trapdoors, death-inducing rooms, and more, which are said to lurk within.

Professor Von Foerster's route into the pyramid is known, and your task is to follow it. Descending into the mystifying depths, you search the secret and deadly rooms in order to find the treasured Golden Idol.

Arriving at the pyramid entrance after an atmospheric attract mode, you are given a choice of eight levels, each of ascending difficulty. Time is not to be wasted: the value of the Golden Idol is perishable. The longer you spend in your search means the less you will realize when you sell the artifact back in civilization — presuming you get back at all.

There are eight stories of eight rooms each to search, every room consisting of up to three floors. You have three units of strength and three sticks of dynamite to aid you; all of the commands are letter combinations from placing the dynamite to walking, ascending, or crawling, entered via the keyboard.

Aztec, created by Paul Stephenson of Datamost for the Apple II, shares the great graphic tradition of Stephenson's pirate masterwork *Swashbuckler.* The graphics are state-of-the-art, the explorer smoothly and *completely* animated. Everything moves: arms, legs, even the stars which orbit his head when he ambles into a wall. Not only is the *adventurer* fully animated, but his slithering, quadrupedal, and upright foes move as well.

Your on-screen proxy always pays strict attention to your commands, though it will take you a while to memorize the twenty-four key commands, many of which are interactive.

For example: pressing "A" instructs your figure to turn "left," though he won't move unless you also tap "W" for "walk". An instant later you may have to jab "S" for "stop," punch "D" for "right" and "C" for "climb."

The commands become second nature after a while. Until then, you can always tell yourself that the explorer's reaction time is only as good as *yours* might be in a similar cold, damp situation. Or maybe he's just a little dazed from the number of times he was walked into walls or stepped off two-story-high platforms at your panicked behest . . .

The player gets to collect weapons and other clues as the hero walks about, poking through piles of rubble or looking in chests. Some of these have nothing in them, others sport dangerous surprises. You have to be quick-fingered to preserve the explorer from each new hazard.

You will actually come to *love* this bold fellow who makes up for lack of good sense by sheer nerve.

Aztec very thoughtfully uses the "escape" key to freeze the action, stop the time, and put a "help" menu on the screen. Also appealing is the fact that the game can be saved and continued. It will keep you engaged for months.

Adventure in Serenia
by Dale W. Rupert

I have died at least thirty times in a half-dozen different ways in my quest to save Princess Priscilla from the evil Wizard Harlin.

And I haven't seen either of them yet. If the rattlesnakes didn't get me, the scorpions did; I've developed a healthy respect for things with fangs in the desert. Now if I can just figure out how to handle more mundane situations like leaky rowboats (which have cost me my life more than once), maybe I'll be on the way to tackling the *real* problems of the world.

That world is the adventureland of Serenia. It is vividly depicted with words, pictures, and sounds thanks to On-Line Systems. This program by Ken and Roberta Williams — remember her from issue four's *Time Zone?* — runs on the IBM personal computer or Apple.

The Williams' have also recently released *The Dark Crystal,* based on the motion picture.

In this adventure game, the computer accepts one- or two-word commands; for example, "GO NORTH" or "GET APPLE" or "JUMP." The bottom of the video screen shows text which describes the scene and asks for your command; the upper portion of the screen is a colorful picture.

With every command, the scene changes. If you drop an object you're carrying, the scene is redrawn to show that object on the ground. The images are not animated, but each scene is drawn quickly enough to give a sense of motion as you play.

You start *Adventure in Serenia* with a few essentials: water, knife, blanket, and so forth. As you wander around, you find other items which may or may not be important to you.

After wandering lost in the desert for hours, you may begin to despise the game; the eighteen page booklet which accompanies the program offers clues which are more tantalizing than helpful. Happily, the booklet also lists a phone number to call if "you're totally stuck and about to burn the

Continued on page 79

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Which player is about to score with flying colors?

Better learn fast. Here comes Galaxian* from Atari.®

Pilot to co-pilot. Galaxian invaders are approaching your home. And they're only from Atari for use with the ATARI® 2600™, Sears Video Arcade† systems, and the ATARI 5200™ SuperSystem.

These Galaxians look, sound, and act no different than the Galaxians you've battled in the arcade. They swoop, dodge, and fire with equal cunning. So you have to know your stuff.

Like the player on the left. He's about to hit a flying yellow Flagship for 150 points. But his opponent, on the right, will score only 30 points for hitting the stationary blue Drone. Tough luck, rookie.

If you want to know even more about which Galaxians to hit, hit the stores for Galaxian.

ATARI

A Warner Communications Company.

Prisoner 2
by Jeff Rovin

Quite a contrast to *Aztec* is one of the most unnerving computergames ever devised: *Prisoner 2.*

Let's state upfront that this Apple, IBM, and Atari-compatible game from Interactive Fantasies (POB 22222, Agoura, CA, 91301) bears some uncomfortable similarities to the 1960s, seventeen-episode TV series *The Prisoner.*

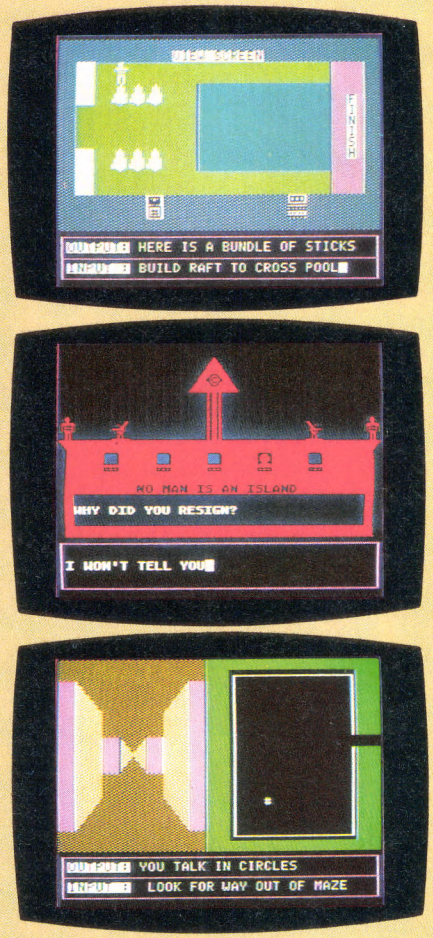
In that show, a secret agent (Patrick McGoohan) resigned from his top-level job, was subsequently gassed and kidnapped, and awoke in the Village, a carnival-like town from which there was no escape. He never learned whether he was being held there by his own kind or by the enemy. All he was ever told was that they wanted "information," which he refused to give them.

In this game, by David Mullich, a Company employee resigns and is hijacked to the Island — from which there is no escape. Or, at least, it's the player's job to *find* the way out.

Apart from feeling that McGoohan — who also created the TV series — is entitled to some royalties, a reviewer must commend this game as superb.

The Island is a community consisting of twenty buildings. Your task is to make your way through these structures whose maze-like courses are invisible. You're not only trying to get from one to the other, you're on a scavenger hunt, searching for keys which will enable you to question the leader of the prison-paradise for clues — Number Two on TV, the Caretaker here.

At the same time, the Caretaker will be trying to get information from you: your three-digit resignation code. If you reveal it in any way during the game, you lose.



Prisoner 2 tests the player's creativity, logic, intuition . . . and discipline in controlling his/her temper.

The instruction booklet describes the game better than we ever could: "Success in surviving the Island requires reading between lines, logical deduction, developing new and creative patterns of thinking, making intuitive moves, and detecting trickery. A resident will constantly be frustrated, confused, discouraged, puzzled, and angry."

For example: you can tip-toe carefully through a maze, communicating to the computer with left-right-up-down commands — and, a mere few steps from the door of a room, tumble into a pit and find yourself transported back to the beginning of the invisible maze.

Revealing too much about the game would spoil its many surprises. However, the opening few moments are inspired: a file cabinet opens, your dossier appears, your resignation letter is screened, and you arrive at the airport. A nicely animated plane takes off in the distance.

You punch in your destination: New York, London, Tokyo, etc; whatever you write on the keyboard, The Island appears on the screen.

A great piece of computergaming from both a design point of view and as a challenge, though the lack of originality is disappointing.

(Ironically, the TV series was McGoohan's cry against excessive computerization, the reduction of people to numbers. That his tale should end up as a very successful computergame merits a philosophical essay, at least. A footnote to such a discourse would have to include the fact that, stamped inside the package, is the bold, black brand *Inspected by 1469.* Seems to me they were doing that sort of thing *years* before we had personal computers.)

Edu-care/Interactive Fantasies, replying to our claim that *Prisoner 2* is very similar to The Prisoner TV series, sent us the following letter:

Dear Sirs:

My congratulations to your organization on your "good taste." For some time, we have felt that *PRISONER 2* is an exceptional computer game.

Although I do not know how the Caretaker-for-the-Master himself would respond, I must deny any significant connection between our game and the ITC series *The Prisoner,* although there is some mention of the series in the game manual, *A Wolf in the Fold.*

In a communication dated November 16, 1982, Edward Gilbert of ITC Entertainment, Inc. stated that "...we have refrained from granting to anyone the right to manufacture and offer for sale in the United States and elsewhere in the Western Hemisphere any video games derived from our series."

PRISONER 2 is actually a remake of an earlier program which was titled *THE PRISONER.* During this "face lift" of the island, The Caretaker appeared to take great pains to avoid any connection with the aforementioned TV series.

Sincerely:

Stephen W. Pederson
President
EDU-WARE SERVICES, INC.

RAMblings

Apple, Atari, IBM, TRS-80, Vic and Timex! You're in the market for a personal computer, and you're confused by the language, by the advertising hype and by the so-called "knowledgable" friends offering well-meaning but very often naive advice.

Which computer to buy? It's a decision that reduces even the most confident consumer into a quivering lump of neurotic uncertainty. Buying a computer, after all, is an enormous investment; one that will grow as the software library supporting it swells to pregnant proportions.

Purchasing a computer can be likened to buying a car. It's important to test drive before leaving the showroom. But *which* model do you "test drive" first? Before all else, it's necessary, of course, to evaluate your needs. Do you really *need* that flashy *Cadillac,* or will a *Volkswagen* serve just as well? Personal taste and budget will determine which machine you buy.

As in the selection of a car, anyone interested in acquiring a personal computer should look beyond the flashy exterior. Open the hood. What powers the vehicle and makes it *go?* Software is the fuel that makes a computer "run." The prospective convert, ready to dive into the baptismal waters of micro-computing, should first look around to see what software programs are available, how readily available they are, and, their price. A Cadillac with an empty gas tank will take you farther than a computer with no programming.

It isn't the purpose of this column to convince readers of the merits of one computer over another. *RAMblings* simply evaluates the "fuel" and reports whether it's *super* or *regular.* Because there is so much software glutting the personal computer market, however, and because of the virtual impossibility of keeping abreast of it all, the vast majority of programs have been unintentionally neglected within this column. The *Cadillacs* have received a great deal of coverage; the *Volkswagens* and *Mavericks,* almost none.

Radio Shack produces and markets four computers bearing the TRS-80 trademark. Models *One* through *Three* are the Cadillacs of the Tandy line, all-inclusive keyboard and monitor units

priced in the four digit range and designed for enthusiasts with a modicum of computer literacy. The Company *Maverick* is Radio Shack's TRS-80 *Color Computer.* It's a small silver-gray keyboard which employs any TV as its monitor. It can be easily linked to a television through the same input jack used by the Atari 2600. It's a low-cost machine designed for people with little or no knowledge of computing, and, because of that, one of the most popular personal computers on the market.

As befitting its popularity, the TRS-80 Color Computer is supported by more than two thousand assorted software programs; a claim that's rivalled only by the Apple computers.

Coco

The TRS-80 Color Computer, or *Coco* as it's fondly called by its legion of fans and supporters, is probably most popular among parents anxious to introduce their children to computing. It's the least expensive of the raised keyboard micro computers, which takes a little of the parental worry out of leaving junior alone to experiment at his own pace.

Still, like any piece of hardware worth its bytes, the Color Computer is only as good as its software. And, with so many programs available, encompassing everything from video games to business utilities and tutorials, there seems little limit to the capabilities of this remarkable little machine.

In coming issues of *Videogaming Illustrated,* we'll examine some of the best programs for the Color Computer, whether they're produced by Radio Shack or the army of cottage hackers who've been captivated by the excellent color, sound, graphics and frugality of the unit.

The Computer Magazines

Some of the most creative as well as exciting software packages available for the Color Computer are the multi-program "magazines."

A computer "magazine," for those who've never seen one, are software packages containing five to ten varied programs published under one cover. All but one of the five magazines presently being produced for Coco are published on a monthly basis and available in either cassette or floppy disk form. While all five are superior products, two offer a variety and quality not found in any piece of software available for any brand of computer.

Chromasette

Chromasette, produced in Santa Barbara, California by Dave Lagerquist and Robin Sager, is the grandaddy of the Color Computer magazines. Published since July, 1981, an average issue features a variety of entertaining and useful programs.

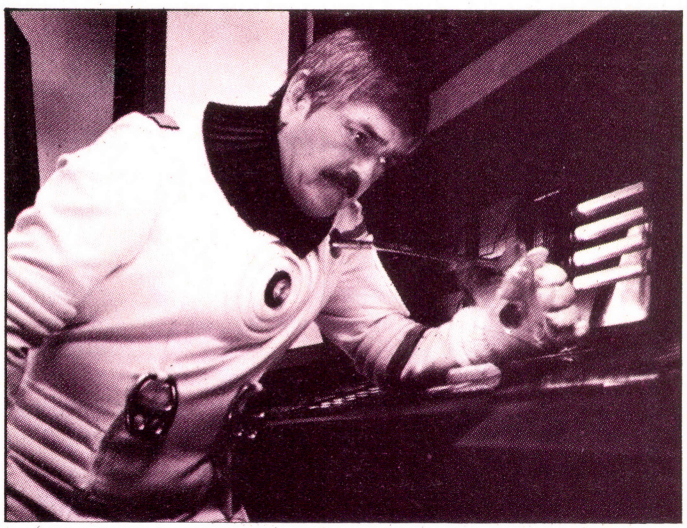
As with all magazines, subscribers are treated to a colorful cover opening each issue. The cover is always a visual treat, flaunting the Color Computer's graphics capabilities with an almost ostentatious flair.

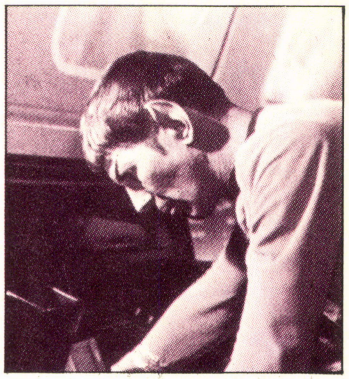
Occasionally, the almost hallucinogenic visuals are set to musical accompaniment. The October, 1982 cover, for example, opened with musical selections from Scott Joplin, Johann Strauss, Muzio Clementi and Ludwig von Beethoven.

The feature programs within a standard issue of *Chromasette* offer something for everyone. There are games such as *Astromines, Pickem, Germ, Moraine, Robot Run* and *Diggem;* most derivative of popular arcade units. There are utilities such as a *Tape Inventory, Cataloger* and various word processing programs like *Keep Text, Small Text* and *Graph Text.* There are even tutorials, or, in layman's language, educational programs. Surprisingly, these very often prove to be as entertaining as the far-less intellectually stimulating recreational segments.

Typing Tutor, from the September 1982 edition, for example, is an entertaining program that will transform virtually anyone into a deci-digited whiz on the keyboard by way of a se-

Continued on page 67





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STAR TREK

Continued from page 27

chines' decision of which people had been "killed" in "attacks." In this way, their cities remained intact and their civilization was not disrupted. Not so for the lives of those decreed to be the "casualties." They were required to enter disintegration chambers. Apparently, these planets had been "playing" for so long that it never occurred to their leaders to end the war completely. But it did occur to the Captain of the Enterprise. Kirk, seeing the computers in question, threw a monkeywrench into their circuitry and initiated peace talks between the planets.

The natives of planet Beta-III patterned their society after the teachings of Landru, the resident ruling mystic. The one catch was that the *real* Landru had died centuries ago ... but not before programming a super-computer to carry on his work. And carry on it did, creating a society of passive individuals who held their passions in check until the regularly scheduled "Red Hour." Visiting the planet, the crew of the starship Archon had been captured by the followers of Landru and were assimilated into the civilization, becoming part of "The Body." Kirk, discovering that the inhabitants of Beta-III were not progressing at a natural rate, once again used his talents as a computer-killer, and induced "Landru" to destroy itself.

The people of Beta-III had it easy compared to the inhabitants of Gamma Trianguli VI, whose computer-ruler was called "Vaal." These unfortunates were kept in a primitive tribal society, doomed to spend eternity without the benefits of love and sexual union (both prohibited by Vaal). Love and sex being two basic staples in the life of James Kirk, the Captain did all in his power to end Vaal's rule. The computer made another mistake regarding Kirk's priorities ... it threatened his starship.

Vaal's energies came from its ability to digest fruits, which its followers regularly "fed" to it. Kirk's strategy was simple: he stopped the ritual feeding from taking place, thus draining Vaal's batteries.

Occasionally, even Kirk could not stand up to a super-computer. One such device was The Guardian of Forever, which described itself as part being and part machine ... and neither being nor machine. Entering this wondrous entity in a drugged state, Dr. McCoy accidentally committed an act that changed history, which resulted in the Enterprise (and Starfleet itself) ceasing to exist. Kirk and Spock, stranded on the Guardian's planet, were the only ones capable of righting McCoy's deed. By entering "yesterday," via the Guardian's portal, and visiting the New York City of 1930, Kirk was able to restore the rightful order of history. Kirk fell in love with a living "focal point" in time and space, Edith Keeler ... and then had to let her die to complete his mission.

Picture a whole world of computer-brained androids, built in the shape of the most handsome men and the most beautiful women, and you have the situation stumbled into by fleeing felon Harcourt Fenton Mudd. Proceeding to let loose his gift of gab on the residents, the crook transformed himself into "I, Mudd," a serious threat to the continued freedom of Kirk and the crew of the Enterprise.

In this charming adventure, Spock joined Kirk in pulling out the plugs by subjecting the androids to a series of illogical acts and observations that would have left Spock's father, Ambassador Sarek, gasping in the throes of a Vulcan heart attack.

Kirk's strangest run-in with an individual well-known to the United Federation of Planets occurred when he met the hapless Dr. Roger Korby. A brilliant researcher, Korby had been stranded on a frozen planet and pre-

sumed dead. Medical nurse Christine Chapel joined the Enterprise crew when she learned that ship might be dispatched to locate Korby's expedition. Formerly his fiance, Christine was shocked to discover that Korby had tranformed himself into an android in order to remain alive. Finally, Korby was forced to admit to himself that he had lost his humanity ... that his mind was now primarily a thinking machine, a computer lacking proper emotional perspective. With Kirk's encouragement, Korby decided to self-destruct, committing machine-a-cide with a phaser.

The question of whether the human brain is *really* the greatest thinking machine in the universe was tackled in the "The Ultimate Computer." Here, we met another well-known hero of the Federation, Dr. Richard Daystrom. Daystrom made the "Duotronic Breakthrough," which enabled a computer's memory to be endowed with human brain patterns.

Boarding the Enterprise with his revolutionary "M-5" computer (no mention was made of what had become of M's one through four), Daystrom had Starfleet authorization to see just how well his computer could run a starship. Kirk immediately felt threatened by the machine's presence, finding himself redundant as the M-5 ran his ship with a skeleton crew.

"The Ultimate Computer" is a play on words, for it is the mind of James T. Kirk that finally earns that title. Daystrom's discoveries had been *too* perfect, even transferring the imperfections of the human mind to his computers' brains. Daystrom had elected to use his *own* mental patterns in the M-5, unaware that he was suffering from profound emotional problems that would soon cause him to have a nervous breakdown. During Starfleet wargames involving the M-5 guided Enterprise, the machine purposefully destroyed hundreds of crewmen on the other ships. After Daystrom's problems came to the surface and he was taken to sickbay, it remained for Kirk to talk the M-5 into "committing suicide."

***Khan Noonian Singh (Ricardo Montalban), his body broken and his mind twisted, prepares to activate the Genesis device. From* The Wrath of Khan.**

This is the "ultimate" study of man's struggle to preserve his identity in the shadow of the machine. McCoy reassured Kirk that he would always be needed aboard the Enterprise, and Spock went on record as recognizing the value of computers, while having "no desire to serve under them."

The most threatening computer to cross paths with the Enterprise on television was "The Changeling," a space probe launched from Earth to collect data from other planets. While in space, it collided with another probe, this from an alien planet, and the two "repaired" each other, confusing and combining their programming to collect data and sterilize entire planets (the other machine's task was originally to sterilize alien soil samples). The combination of Terran and alien sciences created a horrible destructive force that made its way through the universe, destroying inhabited worlds.

Finding its way onto the Enterprise, the "Nomad" probe wreaked havoc, killing Scotty (but restoring him to life again), and absorbing Uhura's memories. Nomad's main purpose in entering our solar system was an attempt to return home, to Earth to seek its creator. By a happy coincidence, the scientist who had constructed Nomad was named Dr. Jackson Roykirk. Due to its faulty programming, Nomad mistook Captain James Kirk for his "father," a mistake which Kirk ultimately used to induce the machine to destroy itself.

If some of the plot elements of "The Changeling" sound familiar, it's due to the similarities present in *Star Trek: The Motion Picture.*

Star Trek: TMP also featured a super-space-probe on a destructive rampage through space, heading back to Earth to seek its creator. In the feature film, however, "V'Ger" was so powerful it could not be induced to destroy itself. Kirk had no choice but to convert it into an ally if Earth and the Enterprise were to survive. The means of this conversion bears some resemblance to the storyline of "The Changeling."

In "The Changeling's" first draft script, Kirk destroyed the probe by programming it with Shakespeare's plays and other emotional literature, which its computer-mind could not digest. In *Star Trek: The Motion Picture,* V'ger absorbed the minds of Enterprise Lt. Ilia and Captain Will Decker, who were in love and fully dedicated to one another. Its newfound knowledge at last gave V'ger a sense of true purpose and life, enabling it to go away from Earth bewildered but enhanced by its new perspective on emotions.

***The Genesis pattern appears on a sensor screen, a messenger of doom unless the* Enterprise *can warp out of the sector. From* The Wrath of Khan.**

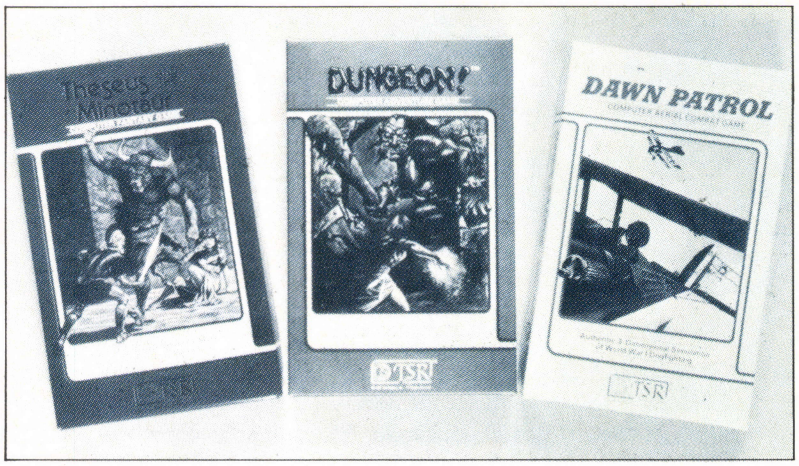
In *Star Trek: TMP,* Spock mind-melded with V'ger. The result: the Vulcan gained an appreciation of his emotional side. Ultimately, that contrast is the message of *Star Trek:* the human body may be a machine, and the brain a computer, but each individual cherishes an unpredictable sphere derived from neither region, and is more than the sum of both.

When Spock returns in *Star Trek III,* transformed, his chess game will undoubtedly be much improved.

DRAGONS

Cont. from page 40

Dragons, a character can rise from humble beginnings to a position of great prominence, power and influence by using the proper amounts of skill, imagination and good judgment. And because the game covers the whole of what is known as Medieval European Mythology, each game session is as challenging as the players' collective talents make it. The game is more a social gathering than a contest. There are no 'winners' and 'losers,' no ultimate conditions of victory. There is always some new goal to reach."



At the present time, TSR's own computer games can only be played on the Apple II, but the games will soon be adapted to other systems.

D&D does not rely on the use of a playing board, tokens, play money or spaces on which to move. "The action takes place in the minds of the participants," Gygax says. "And because of that, there are side benefits to the game. It encourages reading, thinking, creativity, problem solving, mathematical and conceptual skill, group interaction and cooperation.

"Likewise, the social benefits which are adjuncts to the game, such as the removal of age and sex barriers in a participant group, are there principally because the players enjoy playing the game."

Gygax stresses that the game's popularity stems from three main interests in the young: "They are history, including related mythology and its fantasy outgrowths from Robert E. Howard, author of the *Conan* stories, game playing, and imagination."

With its acceptance by game players the world over, Gygax realized that there was a need for more comprehensive rules and *D&D* accessories. To answer this demand, TSR branched out into other areas, creating figurines and other tools to be used in conjunction with the role-playing games. TSR also sponsors game conventions, and, most recently, has entered the videogame software market.

"Gary went on a personal search for talented individuals who would be able to translate the role-playing games into software games," Dieter Sturm relates. "But he wanted something a bit more exciting, a bit more creative than what was presently on the market. Bruce Nesmith and Keith Enge designed the three software games that just came out. All three have high resolution color graphics."

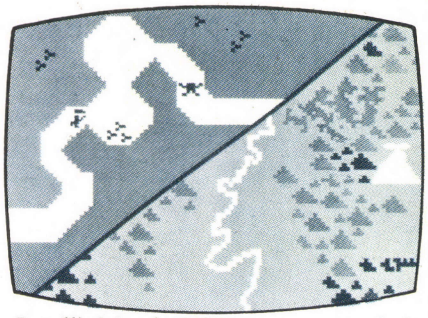
Both Gygax and Sturm believe that the computer game market is one in which TSR will have a major impact.

"All companies have goals and master plans," admits Dieter Sturm. "In 1983, we will be setting up our own diskette duplication center to actually manufacture our own diskettes."

Theseus & the Minotaur is one of the three games TSR has developed. A single player ventures into a three-dimensional maze to rescue the Princess Ariadne. Theseus must contend with the creatures of the labyrinth, including the dreaded Minotaur.

Dungeon! is a computerized version of TSR's *Dungeon!* board game. One to eight adventurers travel along a full color board, while, with the computer, casting "animated spells," battling assorted monsters and gathering treasures.

In *Dungeon!,* the player's powers and strengths depend on which character the player has chosen. To win as an elf, the player needs a mere two thousand points. But, as a wizard, ten thousand points are required. The wizard, however, has more weapons at his command, such as deadly fireballs he can hurl at his enemies.



Intellivision's* D&D *game reveals its labyrinth one section at a time for added suspense.

Also, in *Dungeon!,* if a character finds the Crystal Ball during the course of his/her adventures, (s)he can peer into the contents of a room without entering it, thus avoiding dangers and facilitating the search.

When the player is forced into a confrontation with a monster, the odds of winning are displayed. The player then has the choice of fleeing or fighting.

The third game from TSR, *Dawn Patrol,* is an aerial combat game which places a single player in the cockpit of a WWI plane. There is real-time simulation with animated graphics. The planes are depicted in black and white with three-dimensional detail.

All three games are designed for the APPLE II computer.

TSR also has licensed their concept to thirteen companies, including Mattel, which is releasing *Advanced Dungeons & Dragons* for Intellivision.

The object of this one or two player game is to retrieve and reunite the two halves of the Crown of Kings, which are guarded by winged dragons. One of the game's screens shows the player the overall landscape: two mountain ranges, a forest, a river, and a wall.

Once the player has decided where (s)he wants to begin the quest, the predominant field of play comes into view: a point-of-view, perspective dungeon labyrinth, each section of which is revealed piecemeal.

The player must gather weapons and instruments that will allow him/her to travel the landscape (an axe to cross the forest, a boat to cross the river, etc.) while also gathering arrows that will be needed to fight the pursuant monsters.

All battles in the TSR and Intellivision games are graphically represented. In Starpath's *Dragonstomper* for the Atari VCS, however, the computer does the battling and reads the player the results.

Dragonstomper (reviewed in this issue's Preview section) boasts a wide variety of landmarks, powers, and weapons. If the player is attacked by a monster or warrior, a "menu" appears at the bottom of the screen. The player is given a choice of fighting, fleeing, or using any of the appropriate weapons (s)he has garnered. If the player fights, a blow-by-blow description is verbally given, and points awarded or taken away. The player can flee at any time, or fight on until either of the combatants is dead.

The player has the option to "use" also: gold or a cross or a shield. But, for example, gold will be no use against a spider, though the player can bribe a warrior with gold if the player is too weary to fight.

If the player successfully crosses the Enchanted Landscape and the Enslaved Village, gathering allies, weapons and powers, (s)he is entitled to enter the Dragon's Lair, either to do battle with the dragon or to use cunning to steal the magic amulet, the ultimate prize.

To our knowledge, *Dragonstomper* is not a TSR-licensed game. It is but one example of how far-reaching the *D&D* phenomenon is. And the phenomenon will not stop with video and computer games. Television has adopted the concept, albeit belatedly and half-heartedly.

Rona Jaffee's Mazes and Monsters was an unlicensed telefilm that appeared on CBS some months ago. It followed a group of college students in a role-playing game, one that had tragic consequences for one young man who lived the fantasy too vividly.

Also from CBS is a new weekly series, *Wizards and Warriors,* also without TSR's approval. Starring Jeff *(Taxi)* Conaway, each episode is said to cost a million dollars to produce. It appears to be long on the physical, and short on the spiritual, aspects of the genre.

TSR's own new Entertainment and Media Division is preparing a motion picture based on *D&D.* The script is being written by James Goldman, who is responsible for the scripts of *The Lion in Winter* and *Robin and Marian.*

"From a childhood fairy tale grew what is today the most popular fantasy role playing creation in the world," says Gary Gygax. "The entire reason for the existence of *Dungeons & Dragons* can be explained in a single word.

"That word is 'fun'."

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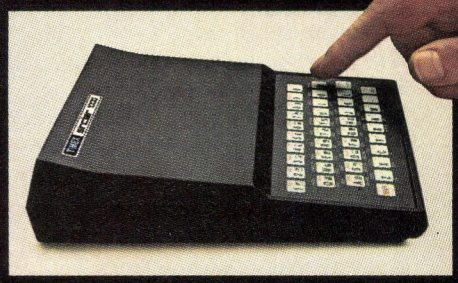

TIMEX COMPUTERS

THE POWER IS WITHIN YOUR REACH

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RAMblings

Continued from page 61.

ries of very rapid but pleasant tests. *Beams,* from the October release, was, contrary to its title and the following description, a visually intriguing tutorial in industrial weight distribution, while *Piano,* from November's lineup, helped to transform Coco into a multi-scaled musical instrument.

Perhaps the most imaginative and fun programs to be found within *Chromasette,* however, are the adventures. In recent months, subscribers have been led through the streets of historic *Williamsburg* in search of an elusive golden horseshoe, and have been left to fend for themselves in a deceptively simplistic but devilishly sinister *House Adventure.*

Far from being watered down versions of more expensive games, adventures, utilities and tutorials, each program within every *Chromasette* "magazine" is a marketable piece of software, fully capable of being packaged and sold as a single computer program. They're exactly the sort of programs found on thirty dollar Atari-compatible cartridges or even more expensive software packages. A single issue of *Chromasette,* however, retails for a mere six dollars, with a twelve issue subscription generously priced at fifty dollars per year.

Cococassette

Equally — if not frequently more — impressive than *Chromasette,* is Tom Dykema's *Cococassette* magazine, a product of T&D Software of Holland, Michigan.

Since its initial release in July, 1982, Dykema has managed to pack an impressive eight to ten programs onto the *Cococassette* every month. And what programs they are!

It was clear from the first issue that Dykema was serious about producing a useful as well as entertaining computer magazine. The initial release introduced subscribers to a very cute, very lively mascot answering to the name *Coco,* and looking like a cross between a *Star Wars* robot and the Color Computer.

In a short, computer-animated cartoon, Coco trots repeatedly to his mailbox in search of the first issue of T&D's *Cococassette,* only to be continually disappointed by an empty mailbox. Then, in swoops the little byte-bird of happiness with the long-awaited magazine, and one can't help but smile watching Coco jump for joy.

An addicting little game called *Racetrack* is the first feature program on the premiere issue. A pleasant diversion, it graphically simulates a day at the races, allowing up to four players to select a horse, place a bet and watch as it trots away with your paycheck. The horses' names are as imaginative as the odds. But watch out for *Ron Reagan.* You're apt to spiral into quick bankruptcy betting on that nag.

The other games within the first issue are *Hangman* and *Robot War. Hangman* is similar to Atari's cartridge, yet offers an expert level calculated to give even the most knowledgable lexicographer a run for his money. *Robot War* is a modified version of the arcade game *Berzerk.* As you move from room to room, however, the number of robots you must destroy increases, while your pursuer becomes increasingly difficult to avoid. There are three levels of difficulty, but if you can get beyond "beginner," you ought to think seriously about answering a few of the ads in *Soldier of Fortune.*

Some of the other programs from the first issue include: *The Music Album,* a utility that allows you, simply, to play one of a half dozen old favorites, such as *Johnny Comes Marching Home* or *Dixie.* You can even create your own old favorites for playback in one of four separate tempos. Since the computer keyboard doubles as a musical console, it's interesting to note the results when you hammer out words, phrases or even whole paragraphs. Your thoughts are set to music, and the orderly, structured relationship to words, moods and music takes on a whole new meaning.

As though the aforementioned weren't enough, there's also *Life Expectancy,* a program that will, after a series of questions are answered, frighten you with a prediction of your longevity. There's a *Calendar* utility which will tell you upon which day of the week any date in the past (to one A.D.) or future (to nine million A.D.) falls. It gives history a whole new perspective. And, for those who like to relax in front of their keyboard with a cool chaser, there's *Bartender,* a program that will call up the recipes of the most popular mixed drinks, or suggest a whole new form of libation by offering recipes for those odd ingredients you have laying around the kitchen.

Far and away the best program from the initial *Cococassette* magazine, however, is the adventure game *Killer Mansion.*

Ever wonder what it's like to find yourself within a dark, vacated mansion, stalked by a homicidally maniacal schizoid with a penchant for fast food (you!)? It's terrific, imaginative fun; just the sort of pleasantry that's assured *Cococassette* the instant success it justly deserves.

As of this writing, there are eight issues of *Cococassette* available. Not every feature will appeal to everyone. It's almost impossible to find a program that lacks even mild interest, however, and invariably, those who are new to the mysterious realm of personal computing will learn something about the Color Computer and its capabilities from each new release.

During the past year, *Cococassette* has featured variations of the most popular video games: *Blackjack, Basketball, Frenzy, Flag Capture, Tank Battle, Balloon Drop, Bowling, Convoy, Loony Lander, Shoot Out, Space Station* and *Diffuse.* Yet, as with *Chromasette,* the most interesting programs tend to be the tutorials and utilities.

Biorhythm graphically charts the physical, intellectual and emotional cycles, while *Cost of Living* offers fifty tips on ways to save money during these financially nebulous times. The December, 1982, issue offers a lengthy one hundred question test which evaluates individual creativity. And, for the football buff, the September release features not only a complete schedule of the pre-strike N.F.L. games, but predictions on the outcome of each. Even with the aborted schedule of last season, a look at the outcome of the final games is amusing in retrospect.

The random samplings of *Cococassette* programs mentioned here should vividly illustrate the variety to be found on Dykema and company's computer "magazine" offering. With programs like *Checkbook Balancer, Trigonometry Tutor, Quick Think, Alphabetizer, Calorie Counter, Promissory Loan Analyser* and *Terrestrial Adventure,* starring an amazing look-alike for a certain extra-terrestrial super-star of the year past, there's something for every member of the household on every issue.

There's no greater software buy for any computer.

SATAN'S HOLLOW

Continued from page 47

which reach to the floor of the valley, where the base ship rests. A simple shot from the ship's barrel will dispatch any of these satanic visages — but they are difficult to hit. In dealing with any of the three, the player must simultaneously fire at the image while avoiding the columns of fire.

The best way to quickly dispatch these fire-breathers is to line the ship up in the middle of the screen and fire shots just a second after the head appears. The flame will take a moment to reach ground level. When it does, move the ship as far away as possible. If your first shots don't catch the demon wait until it approaches the side of the screen your ship is on, and fire once again. This time you will have to move *through* the fire with the aid of the shielding function. Once again, *if* your shots miss, repeat the above process, moving from one side of the screen to the other, surviving the fire with momentary ignition of the shield, while continuing to shoot. Once a salvo strikes the head of Lucifer, Old Nick or Beelzebub, the face — and the fire — vanish.

Bridge-Bomber & Night Gaunts

At intermediate levels of the game, the Bridge-Bomber will fly across the sky, dropping rocks on any portions of a bridge the player has managed to build. These rocks explode on contact, and will burn away a piece of the bridge, which the player is then obliged to replace by picking up a new piece at the left hand corner of the screen, as usual. A well-aimed shot at the Bridge-Bomber will destroy it, but not the rock it drops, so be prepared to get out of the vicinity of the bridge; the explosion can tear through the ship's shield! Keep cool, and simply rebuild the bridge.

The Night Gaunts (my own term; not Bally's) are those gargoyles which appear black against a midnight sky. The player will only be able to track them by their glowing red eyes. The bombs which they drop are visible, but are of little use in helping to determine where the Gaunts really are, since, as soon as a bomb appears, it is dropped and the Night Gaunt is already off on a new course.

The red-eyed Gaunts are as easily dispatched as regular gargoyles. They are just more difficult to spot. Since many will dive close to the ground — even below the player's ship — it is important that players concentrate their attention on where the red dots are. When they are at the bottom of the screen, activating the shield and scooting sideways will destroy them. In the air, of course, they must simply be shot. Remember that, although only the eyes and an occasional shadow are visible, the target is much larger; a ship's bullet does not have to strike the red eyes in order to destroy the Night Gaunt.

Ship Stealing

Occasionally during game play a gargoyle will fly below the player's ship, move over to the left where extra ships are stored, and try to steal one. Stolen ships are easily retrievable: simply move beneath the ascending gargoyle and blast it. The gargoyle will vanish and the stolen ship will float safely back to its base.

When a Ship-Stealer is flanked by other gargoyles descending at the same time, switch on the shield and move through them, then blast the one carrying away your ship.

Defeating Satan

Once a bridge has been successfully built, the player can cross it to arrive in Satan's Hollow itself. In the Hollow, a small figure of Satan will appear in the sky, throwing pitchforks at the ship with lightning-like speed. Sometimes one or several swirling fireballs also appear.

The pitchforks are difficult to avoid because they come down so fast. However, the player can foil Satan first time, every time, by employing this method of self-defense:

As Satan's theme plays, line up your ship in the exact center of the screen. One beat *after* the music stops, fire two shots in the air. The whirlwind image of Satan will crash right into your line of fire. It works every time.

After Satan is defeated, *Satan's Hollow* awards the player bonus points for each flag on the clifftop, and also provides the ship in use with an extra gun-barrel. A maximum of three gun-barrels is all any ship will be awarded, but with a triple-barrel ship, rows of double-shots during regular play (the gargoyles and Lucifer, Old Nick and Beelzebub) become the norm.

Thank Hell for small favors!

PHOENIX

Continued from page 33

right or left. Since you cannot move while the screen is up, there is no harm in this maneuver. However, as soon as the field is gone you will be moving, thus possibly avoiding being blasted out of existence.

After drilling a hole in the bottom of the parentship, position yourself at its extreme edge and begin to blast through the middle layer. This will take some time as the middle layer is constantly moving.

Once you have shot most of this layer away, move at once back to the original hole you were cutting, being careful not to be hit by the falling bombs. Arrange yourself under the hole, start up the force field, and fire away.

You should be able to penetrate the control room and kill the pilot before the field is gone. If you do not, run to the edge and wait until you build up power before trying again. Since the parentship never lands, you do not have to worry about it crushing you as do the extraterrestrials of *Space Invaders*.

Once the parentship is gone, you will be battling the first squad of the second wave. All squads in every wave should be treated alike, as the patterns never vary the way they do in the arcade.

Comment

In translating an arcade game into a home version, there are bound to be changes. These changes will, without a doubt, make some people happy, others not-so-happy.

Phoenix is no exception.

In the home version, the evocative starry backdrop has been omitted from the first two squads. Also missing is the fireball effect when the large Phoenixes are destroyed. Gone, too, is the changing of the large Phoenixes from glowballs into birds. In the home version they appear fully-blown.

Yet, these are minor concessions. The graphics are excellent, and you do experience the feel of the arcade game. The explosion of the parentship is especially spectacular.

The one *good* change to be found in the home version is that the player is able to fire through the force field. This is not possible in the arcade game, and is a welcome addition.

Continued from page 38

Dragonstomper

Object

As a fully licensed and professional Dragonstomper, you must fight your way to and through the dragon's lair. Once there, you must obtain a magic amulet, either by stealing it or by killing the dragon.

Three separate games are involved, each of which sprawls over several screens: the "Enchanted Countryside," in which you avoid traps, fight monsters, and gain power, magic, and money which enable you to cross a bridge into the next game realm; the "Oppressed Village," where you further equip yourself with weaponry, allies, and magic amidst the chaos of looting; and the "Dragon's Cave," where the final confrontation takes place.

The joystick is used to register the player's choices from a menu of options as well as to maneuver the hero-figure.

J.C.: *Dragonstomper* is superior to Intellivision's fine *Advanced Dungeons and Dragons* offering, and is the first non-computer game which captures the spirit of Dungeons and Dragons.

Though this game is not officially a part of the Dungeons and Dragons catalogue, it offers the player the same myriad kinds of choice available to fans of the TSR role-playing series. Menaces in the broad tapestry include warriors, spiders, beetles, ghouls, golems, maniacs, and snakes.

Scoring opportunities and confrontations occur in swamps, churches, castles, trees, bushes, lakes, and bridges — and that's just the first game. The player has a variety of weapons and powers to collect and exploit, such as crosses, keys, gold, shields, and more, all the while monitoring strength and dexterity factors as well.

The complexity and slow pace may be off-putting to pure videogame buffs, as the game lacks shoot-'em-up excitement. But it builds. After you become familiar with this world and its rules, you become involved.

The graphics, alas, are second-rate. A mere dot is used to represent the Dragonstomper, a disappointment given Supercharger's capabilities. The menaces and foliage are also of the cardboard cutout school. But the game grows by attacking the mind and imagination more than appealing to the trigger finger.

E.C.M.: I'm going to advise you to heed Jim's review, since no one on this planet can be more *bored* with this videogame than I was. After the computer killed me a few times in the second game, I lost all interest in seeing the dragon's lair.

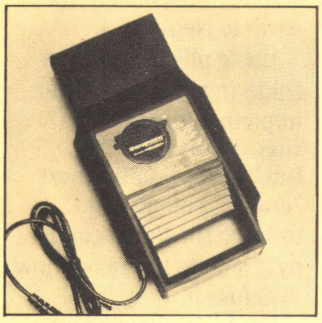
I emphasize that it was the computer which did me in, rather than my own lack of patience or skill. I find it irritating to sit back while a machine randomly decides my fate in any given situation. Where is the skill in this game? My shields never seemed to do me any good, and I *never* had enough gold. A cross or a key came in handy now and again but, ultimately, they served only to prolong the agony.

Actually, I find the aforementioned to be a problem inherent in non-video role-playing games, where the dice determine whether you survive or fall in a particular battle. That kind of passive fatalism just isn't for me.

J.C. mentioned how bad the graphics in *Dragonstomper* are, and I suppose that's one reason I won't lose any sleep if I never meet the old worm. Sure they crammed a lot of *terrain* in here, but it's map-simple; and who *gives* a farthing about graphics if there's no pace, no anticipation? Atari's old 2600 *Adventure* has *miserable* graphics, but I love the venerable old cartridge. It has heart and drama. This has gall and sloth.

Give me a break. Give me *Suicide Mission.*

Starpath Supercharger



This unit interfaces the Atari 2600 with a cassette tape player, allowing cartridges to be fed from the player into the VCS console.

The result is expanded play capacity for the 2600 without the expense of buying a more sophisticated system such as Intellivision or the Atari 5600.

ECM: There are already a wealth of excellent games for the Atari 2600, but for the voracious videogamer the Supercharger is recommended — with qualifiers.

Of the six games thus far released by Starpath, none is a clunker. One is great *(Suicide Mission),* a couple are good but derivative *(Communist Mutants From Space* from *Galaxian; Phaser Patrol* from *StarMaster* et al.) one is challenging *(Escape from the Mindmaster),* and the rest are simple good fun.

Selected game reviews follow. As for the system itself overall, *Supercharger* and its software offer many more options, variations, and strategies than the average 2600 game.

I was very impressed, too, with the control I had using the joystick or paddle. Movement is fast and fluid.

The graphics, while not of ColecoVision or Intellivision quality, are on the average better than 2600 norm. More on this in the individual reviews.

Buyers should be alert to the fact that using a battery-powered tape recorder to load the games may create thick, annoying vertical lines over the gamefields. A plug-in recorder eliminates that problem.

JC: I found the Supercharger a *must* buy if you can't afford to go from the 2600 to a more advanced system. It's good to see a company thinking creatively and economically in that sense rather than just trotting out yet another "third generation" videogame.

I'm pleased to note that a number of the Starpath games take a while to play; it's not all wham-bam-thank-you-ram like you get with many videogames. Some games take from thirty to sixty minutes to complete.

One other bonus: most game tapes contain previews of the other games. You get to *see* what's available before handing over your precious dollars.

Suicide Mission

Object

The player controls a submarine that has been shrunk and injected into a virus-ridden body. Colonies and subcolonies of the virus must be destroyed, and the resultant viral Coils blasted individually.

Difficulty switches determine single or rapid fire, and the player is allowed the choice of three game speeds. The player also has the option of being protected with a Screen, though if the Screen is left on too long, the virus, the player, and the host body are vaporized.

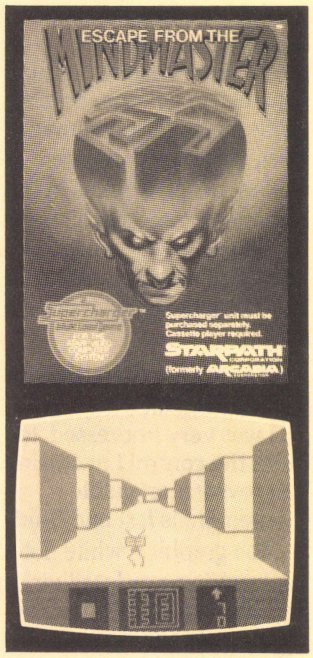
E.C.M.: This is surely the most derivative of the Starpath games: it's *Asteroids,* as the free-floating ship spins and blasts a swarm of enemies. But it's *Asteroids* the way Atari's *Asteroids should* have been. The pace is frantic, and I was very much taken with the ultra-realistic animation of the ship and especially the Coils. The graphics are *very* effective, sketched in the Vectrex-style of line figures on a color field.

Pictures and play both contribute to make the game virtually arcade-quality.

J.C.: I agree with E.C. that this is a fine and thrilling game, one which will tax the skills of even the most seasoned videogamer.

However, I resent the "inside the body" label. With all it's enhanced memory, Starpath should have been able to find a way to provide adventures in different parts of the human body, as in Imagic's *Microsurgeon.* Even the 2600 compatible *Fantastic Voyage* has a screen littered with constricting and widening blood vessels. This is one of the few games from Starpath which does not have multiple screens or a plethora of gauges and dials, and it would have benefitted hugely from both.

Overall, however, I enjoyed and recommend the game to fans of hyper-speed videogames.



Escape From The Mindmaster

Object

The nasty, super-intelligent alien Mindmaster has captured you and is subjecting you to a battery of tests. To escape, you must negotiate a series of six mazes, performing tests of memory while evading an alien Stalker and sliding, scythe-like force fields.

The mazes are offered in point-of-view perspective, with an overhead "radar view" map to help you keep track of your position.

Most mazes also contain tests of agility, reflex, recall, dexterity, or coordination, such as locating puzzle pieces and finding their proper niche.

J.C.: I suspect that most maze lovers can do without all the chasing and gobbling which has dominated this genre for years; hence, they will readily welcome this videogame.

Escape from the Mindmaster replaces all that chomping with extraordinary point-of-view graphics and intellectual challenges.

Not that there aren't danger situations.

Even players with a good memory will be driven to distraction by the force fields and the nefarious Stalker. Though the Stalker is a stick figure, the drama of the confrontation outweighs the limp visuals.

Additional complications arise when, in later mazes, doors disappear after you've passed through them.

Time is a factor in scoring, though the pace is leisurely — until the player's own frustrations quicken the game. Highly recommended.

E.C.M.: *Escape from the Mindmaster* is challenging to be sure, but I feel that much of this is attributable to inadequate design.

For example, the direction in which the player travels is indicated not by an arrow in the *logical* place — the overhead "radar" map — but by a separate arrow floating alongside. The player must look from the "real-life" point-of-view screen to the overhead map to the arrow gauge. No wonder the game is disorienting!

Also, the joystick-controlled player covers too much ground with each stride. Backtracking to find a missed door or peg is like parallel parking at sixty m.p.h.

The special tests which each maze contain are rather mundane, pegs-into-holes failing to thrill me. But they do add spice and a welcome relief from that shoddy maze.

Bomb Squad

Object

An evil terrorist named Boris has left you a little gift: a ticking superbomb. If it goes off, a great metropolis will be transplanted from earth to Neptune.

Using pliers, cutters, a soldering iron, and other implements, as well as suggestions from the Intellivoice bomb expert "Frank," you must go through the bomb circuit-by-circuit to figure out how to defuse it.

E.C.M.: I cogitated over this review for several hours, because I didn't want to say anything bad about *Bomb Squad.* It happens to be a topnotch game. You've got twenty minutes to remove and replace wiring components, put them back if you took out the wrong ones, go on to another cir-

cuit, and save the city. No question in my mind that the designer should get a medal: you actually *feel* the pressure thanks to the whirring clock, intimidating mass of circuitry, background sirens, and other ominous sounds.

But this game really does require a certain kind of player. It's like a pet skunk: not everyone can enjoy owning one. *Bomb Squad* requires an equal blend of logic and luck. But most of all it calls for patience. It also helps to have a mechanical bent, since you're going to spend most of your time with a tool "in-hand."

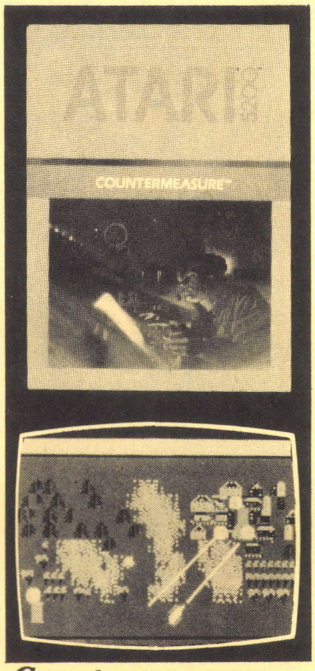
In case you haven't gotten ahead of me, this cartridge put me to sleep. Yet, there's no disputing its quality; the audience for which it was designed will have a field day.

J.C.: I find it interesting that the same month has seen the release of two videogames about terrorists: *Bomb Squad* and *Countermeasure.* I sure hope we're not on the cusp of making that sort of character into a folk hero. I would caution videogame manufacturers to be a little more discriminating.

That criticism aside, this is a near-perfect videogame. The excitement is internalized: you don't have to keep on the lookout for dancing aliens or meandering dragons. It's you vs. the clock. In other words, the mind has got to work faster than the hand.

One aspect of this game which I found especially appealing is the "code screen," a twenty-square screen. As you repair circuit boards, they change the order in which the squares are lit. Referring to the instruction booklet tells you what this means and how it can be used to disarm the bomb posthaste.

This is the kind of game *Reactor* should have been.



Countermeasure

Object

You are the driver of a supertank, roaming enemy territory in order to destroy deadly pillboxes, raid fuel depots, blast jeeps and cruise missiles, and immobilize warhead-launching silos.

The screen, cluttered with trees, houses, shrubs, and other scenery, inhibits your progress.

Fail to complete your mission before the ten minute clock runs out and an all-out attack is launched on Washington, D.C. Then, the only way to halt the bombardment is by programming the three-letter recall code. You must search the depots for the correct order in which the letters L, O, and E are to be arranged — or, in a pinch, try various combinations and hope one of them is correct.

J.C.: This is the best tank-line game on the market, though I personally found it unappealing. Technically, it's impressive: the scrolling landscape and vivid explosions make for the most realistic simulation of ground combat money can buy.

The question is why *bother?* The bulk of the game is cannonfire; for all its memory, the 5200 can and should be put to better use. The recall code element is so trite and non-challenging as to be incidental. Without knowing the order in which the letters should be punched-in, chances are you'll hit the correct sequence before the missiles hit the U.S.

And I'm not sure that the view from space of the warhead contrails descending on this country is in particularly good taste. Nuclear war is serious business; the superficial "waste-'em" medium of videogaming is not the place to show our nation being destroyed. If there's a message for the participant, a warning as in the novel *Fail Safe* or the movie *Dr. Strangelove,* fine. But in a videogame?

E.C.M.: Jim and I are worlds apart on this one.

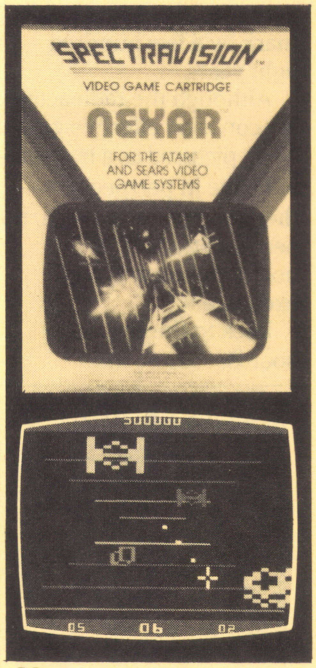
First, the game. It's terrific. My colleague seems to forget that there *are* people who like tank and combat games and, as such, this one's a masterpiece.

The recall code element which he dismisses as infantile lends *purpose* to the assault on the enemy: in a very simplistic way, it shows that there's more to battle than just killing. Sometimes there are matters of national security at stake.

I don't want to attribute more to *Countermeasure* than Atari put there. It's intended as entertainment, and succeeds mightily as such. However, it has more levels and texture than ninety percent of the games on the market.

As for the obliteration of the U.S., it's a frightening, stomach-wrenching sight to see those projectiles headed our way.

If we had *more* sights like that — videogames are as suitable a medium as anywhere else — maybe people would react to the arms race with greater sobriety.



Nexar

Object

In a distant sector of the universe, you stand poised at the entrance to a space warp. There, saucers and radioactive beacons are entering our system with evil intentions. Moving your crosshairs in any direction around the core of the warp, you vaporize the enemy artifacts as they appear.

E.C.M.: This is similar to the "Space Warp" wave of *Gorf,* with one exception: it stinks.

I can't think of a single aspect of *Nexar* to recommend: gameplay is a cinch, even at the "difficult" levels, the graphics are drab, and the theme is yesterday's soup warmed over. I was so bored that I found myself rearranging the letters in *Nexar* to see how many other words I could spell. "Axe" was the first one which came to mind, which is what I'd have taken to this cartridge if one were handy.

Yet another turkey from Spectravision.

J.C.: Contrary to what E.C. says, Spectravision has shown that they can produce good games for the 2600 — witness *Planet Patrol.* However, I have to

agree that *Nexar* misses its mark by a few hundred light years.

Although the radioactive beacon is an effective graphic — it's pictured as a transparent cube in perspective — there's no sense of place, no personality. And, as E.C. noted, there's very little excitement.

Back to the drawing boards.

Shark! Shark!

Object

You're a tiny fish in a heavily populated pond. You may feast on any fish which is smaller than you, whereas you are fair game for any seadweller who is larger.

The more fish you swallow, the more you grow, thus widening the swath of fish, seahorses, crabs, etc. you can eat. The bigger your fish, the faster it swims.

Points are awarded for the number of fish you consume, and for nibbling at the tail of a giant, black shark which regularly appears. Of course, the shark can turn quickly and gulp *your* fish down, so you must strike swiftly and hustle away. Touching a jellyfish at *any* time means instant death.

Each player gets five fish at the start of the game.

J.C.: A positively *delightful* Intellivision game, certainly one of the finest cartridges for this system.

Shark! Shark! is a truly *family* game. That doesn't mean it's *easy:* it means that kids can play it, avoiding the shark, growing as far as they can; or that adults can go for the points, daring the predators and chasing the crustaceans, who are only vulnerable when they are *descending* in the water. The theme, though still of the only-the-strong-survive school, is not so graphically violent as to trouble young children.

One aspect of this cartridge which must be singled out are the sound effects. You'd think you were playing underwater, they are *that* good. Likewise, the animation of the fish and seaweed both is excellent. A "must" cartridge for Intellivision owners.

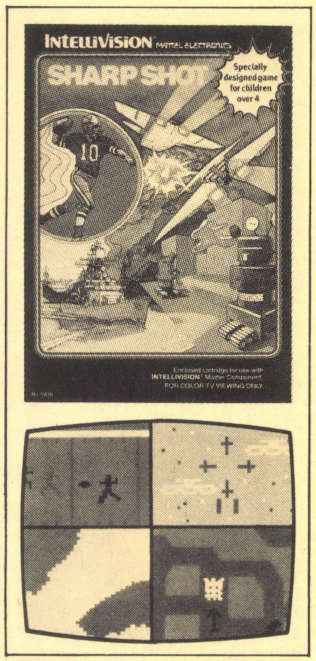
E.C.M.: No argument here. I've heard a few videogamers carp (no pun intended) that they would have had more fun playing a diver spearing the fish instead of making like the Incredible Mr. Limpet, but that's a matter of personal taste and a vicious streak.

This is actually a *sweet* game and, as Jim noted, a superb technical achievement. There's nothing quite like it on the market which, regrettably, is something I find myself saying less and less as time goes on.

Producers of schlock television and movies are fond of saying that they are giving the public what they want. Critics answer that the public will accept junk only because that is all they are ever offered.

Alert videogamers ought to be educating the companies by avoiding the derivative designs.

Shark! Shark! is an original.



Sharp Shot

Object

This cartridge excerpts and abbreviates four of Intellivision's most popular cartridges: *Night Stalker, NFL Football, Space Battle,* and *Sub Hunt.*

All the player gets to do is shoot: fire arrows at monsters in *Maze Shoot,* throw a football in *Football Passing,* blast saucers through an immobile gunsight in *Space Gunner,* and sink ships in *Submarine.*

E.C.M.: Billed as a game for children, this is a handy introduction to videogaming. The quarterback, missile-firing sub, etc., are all controlled by the computer: all the novice has to do is fire when something is in range.

A useful primer to develop hand-eye coordination, as well as give little kids a videogame they can actually play.

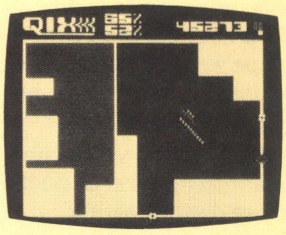
J.C.: This is not just an "innocent" *Reader's Digest* version of four popular videogames.

When shooting is attached to some other aspect of gameplay, such as targeting, employing decoys, or stalking an enemy, there is at least suspense and a flimsy narrative to justify the action. *Sharp Shot* is a cartridge which caters to the lowest and least meaningful facet of videogaming — blowing objects away.

Intellivision obviously wants to nurture an audience for its action games. Fair enough. In that case they should have done as Starpath does and tag them onto another cartridge. To cater solely to the urge to fling and destroy things is beneath the relative sophistication of the Intellivision system.

Sorry for (I admit it) the kneejerk reaction. But a cartridge like this only fuels the antivideogame forces who, wrongly, say that simply blasting things is our hobby's *raison d'etre.*

And, objectively speaking, none of the four abridgements is going to hold the attention of even a young child. Good idea, giving a chance for children to feel like grownups, but way-off-the-mark execution.



Qix

Object

Qix is an electric spark which enjoys being free to bolt about the entire screen. Your goal is to use a small marker to partition off as much of the screen as possible.

As you complete quadrangles of any shape and size, you are awarded points depending upon the size of the area you have blocked out. However, if the roaming Qix spears your line at any point *before* the quadrangle is enclosed on four sides, you lose one of your five markers.

Making life particularly difficult are Sparx which travel the lines you have

drawn, hoping to catch and sizzle your marker.

E.C.M.: Never having played this game in the arcade, I had no idea what to expect. If only I'd known what I was missing: in about ten seconds I was hooked on *Qix*.

Strategies? You can approach this game a million different ways, trying to divide the screen a small chunk at a time, going for big pieces, moving slow or fast for more or less points by hitting different buttons; then there are the two-Qix screens to worry about.

This is a fast, intellectual game. What with *Centipede* and *Countermeasure*, Atari's 5200 is, in my mind, the unit to beat. The colors are not as vivid as Coleco-Vision, and the graphics not as detailed, but the joystick is infinitely superior and gameplay is uniformly fast and explosive, in contrast to the oftentimes studied Coleco selections.

Nice going, Sunnyvale!

J.C.: I'm a *Qix* arcade fan, and I'm pleased with this adaptation. I did experience a small measure of disappointment with the graphics: the bolt charges about the screen with the same speed as its arcade counterpart, but it is less detailed visually.

Also, this isn't Atari's fault, but I'm used to playing the game with a screen that's taller than it is wide. This is the traditional complaint of arcadegamers, and only systems with self-contained screens can do anything about it. Still, it did hamper my enjoyment of the 5200 *Qix*.

These complaints aside, Atari has done a commendable job, and I agree with E.C. that the 5200 library is rapidly growing to the point where it has to be the first choice of arcade buffs when considering a home videogame system.

X-Man

Object

This is an adult game, the first for the 2600 from Game-X.

Gameplay is two-phased: the player must guide a man through a maze, avoiding the anatomy-abbreviating scissors, chomping teeth, and pincered crabs.

When the player successfully reaches the center of the maze, the screen changes to a bedroom. In deference to our younger readers, the specifics cannot be discussed at length. Suffice to say that, in graphic detail, intimate goals must be achieved before time runs out.

E.C.M.: A great debate raged in these offices as to whether this game should be covered, or advertising accepted from its manufacturer.

We opted to permit both.

Although this game doesn't offend me — indeed, I rather enjoy it — Jim Clark detests it, as do many members of the staff. However, even those who do not like the game or its theme decided that it is not our place to censor news or reviews. Justifying censorship would allow you, in theory, to stop reviewing games like *Horse Racing* just because you may not approve of gambling, or *Outlaw* because it's wrong to murder.

It was better, we felt, to let Jim and I have our say.

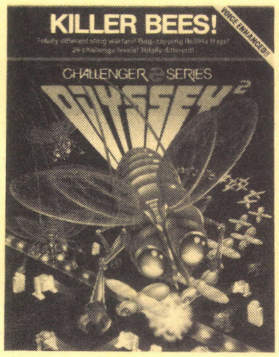
My feeling is that this is a great adult party game. The maze is surprisingly challenging, and the more intimate phase is unique in the annals of videogaming. It's not like shooting ranks of invaders or gulping down dots.

We cannot, of course, relate the scenario. It's enough to say that adults who purchase this videogame as a novelty, change-of-pace will not be disappointed with it.

J.C.: Addressing first things first, the game aspect in *X-Man* is negligible; this cartridge does not exist to challenge the consumer. Certainly it wasn't crafted with the love which is evident in most videogames.

Nor does it titillate the consumer. Without discussing the whole issue of the worth or lack-of-worth in pornography, this program reduces intimacy to the level of a carnival sideshow.

Adults who can't find anything better to do than chuckle over a silly, sniggering, sexually oriented game need their heads examined and values re-evaluated. I've seen grownups have fun with *Mousetrap* and *Ms. Pac-Man* and advise them to continue to do so.



Killer Bees

Object

You control a swarm of busy bees. Instead of buzzing from flower to flower — or destroying them, as the bent-out-of-shape Video Victor — you must sting Beebots, hive-invaders from another world. The sting is accomplished by passing the swarm over them.

Sting them once and they slow. Sting them again and they die.

In the meantime, you must look out for swarms of green, blue, and red bees. They will deplete your squadron, and the weaker your force the more stings it takes to stop a Beebot. The only way to do the bad bugs in is by catching them between the two poles of the Bug Zapper, which is located outside the hive. You control the vertical motion of this weapon and can fire at will. But each shot must count, as it does not recharge until you've rid the hive of another Beebot.

Killer Bees is one of the Voice games for Odyssey 2.

E.C.M.: Once again, Odyssey's graphics are about as sparse as you can get. The bees are mere dots, and the Beebots antennaed blobs.

But, as is increasingly the case with Odyssey 2 cartridges, gameplay is excellent.

The hive is a very tight field in which to stalk your quarry, and as the waves advance and more and more Beebots crowd the screen you'll find collision with enemy bees more likely.

Fun, fast, highly original, and sporting *excellent* buzzing and voice effects, this is one game which doesn't *need* the upcoming Odyssey 3 to be a smash.

J.C.: I couldn't agree more with E.C. This game *starts* tough and doesn't relent as play goes on. But what's particularly exciting about *Killer Bees* is that as your swarm decreases, you must employ different strategies to try to pull each wave out of the fire — for example, watching the pattern in which a Beebot is moving and trying to sting it not through wild pursuit but by "heading it off at the pass," so to speak.

And, of course, just when you think a given level can't get any worse, more enemy bees flood the screen.

PINBALL

Continued from page 41.

work in hardware and software. By necessity, pinball makers can go it alone for the most part.

"Everybody does it differently," Ritchie concedes, "but essentially I build the thing myself. I don't let anybody touch my stuff unless there's some technical aspect that's beyond me. In other words, I don't go out of my way to get anyone else to help.

"I start with a bunch of sketches of how I want the thing to look," he explains. "I want what I think will be an attractive, eye-catching playfield based on a solid, workable concept." The term 'workable' can include both technical and aesthetic considerations. While creating a three level pinball machine with playfields that go opaque when the ball goes from one level to another might be a great idea, it may be impossible to realistically create.

"Then I make what is called a 'master drawing,'" Ritchie continues. "That will include the border, the size of the playfield, and all that." The master drawing is not only a representative piece of artwork, but a blueprint as well. "That will be taken to the company workshop, where the plywood will be sized and cut. Then the holes for the bumpers and targets and so forth will be made. The finished product is what is called the 'white wood.'"

The pinball designer then goes from being a carpenter to a toy maker. "You build all the parts you want on the white wood," Ritchie relates, "and just play around with it until you get the kind of ball action you're looking for." That means that for days, weeks, even months, the designer must use an accumulated knowledge of both math and available pinball gimmicks to create a game which will be consistently interesting to a player. He must experiment until he is satisfied. But the groundwork isn't complete even then.

"Once you're set on a playfield, you want to start working on rules," the designer says. "You know, the little extras you give the player once they've achieved a certain combination of targets, bumpers, ramps, dropholes, and whatever. Extra balls, specials, that sort of thing."

It's best that a designer also tie in his rules to the subject matter of the game. For instance, it might be a good idea to have a system of extra ball targets, rather than dropholes, on a Dirty Harry game, let's say — while the dropholes would better serve something like a Tarzan game.

"Once the rules are straight in your own mind, and hopefully on paper, you take the game to a company programmer and say 'let's do it.' Then it is up to both of you to figure out your options. In other words, how to achieve what you want as quickly and economically as possible. You, as the designer, are directly involved with everything even though you may not know how to do things like wiring. You learn fast."

Just a few years ago, pinball making was a mechanical job. Today, programmers compute a game's rules into microprocessors, all the while taking input from the designer and fellow workers. "Someone else can come up with a great idea and slap it into your game," Ritchie admits. "That happens all the time."

"Competing against videogames is tough. We designers have to come up with machines that are less expensive and easier to replicate."

Finally, after all that work, the game is ready to be actually built. "Now comes the 'prototype runs.' That means the pinball cabinet has to be made, and that, in turn, means the artwork has to be finished.

"Again, everybody does this in different ways. What I do is present my ideas for artwork directly to an artist I trust, someone who knows what I want and the way I think. At Williams, that usually means Constantino Mitchell. He realizes my ideas on paper. From there, silkscreens are made and brought for approval to the executives in charge.

"Once everything's okayed, we start making prototypes. The silkscreens are the blueprints for all the artwork — on the backglass, the playing field, and the cabinet. The artwork is literally screened onto the machines. You lay the things down and color in the holes, essentially."

All during the process, special consideration has been given to make sure the game is durable. Even the best playing games, like the groundbreaking Atari pinball machines of the late seventies, can be done in by faulty maintenance design.

"Pinball is not a thriving business today," Joe Cicak relates. "It's unfortunate, but it really doesn't matter how much money the machines make; arcade owners don't want to handle them. The companies may come out with a machine that'll be a far longer money maker than any videogame, but the operators won't touch it because they don't like to constantly adjust switches and fix maintenance bugs."

"When you're talking about a mechanical game," Ritchie stresses, "making it maintenance-free is nigh near impossible. As long as you have an actual pinball moving around on an actual board — not a video version — you're going to have switches, wires, and mess."

In an attempt to circumvent this problem, another stage in pinball making was created: the sample stage. "You make five or six samples and then play the hell out of them to make sure they will be reliable," Ritchie says. "After that, you make about five more and ship the ten or twelve machines all over the country to see how and what they do."

The how means the money they make. That will tell the designer how successful his concept is. The what means what kinks have to be worked out of the structural design, what bumpers have to be tightened, what switches have to be eliminated, what tricks have to be added. These suggestions are carefully heeded by both manufacturer and designer.

"We get feedback on what works, what doesn't work, and what arcade owners, managers, and players like or dislike," Ritchie says. "From that comes final adjustments. Once you do all those things, you've got yourself a game."

At last report, Mark Ritchie was awaiting word on *Thunderball's* performance in its test engagement while working on new videogame designs for Williams — who, like most everyone else, was cutting back pinball production.

"Competing against videogames is tough," Ritchie admits. "Pinball designers have to adjust their thinking to extremes. I saw the last pinball decline because of foosball and air hockey, but then I saw it bounce back like you wouldn't believe. I keep hoping it'll happen like that again."

MIGHTY MOUSE

"Lisa" stands for Local Integrated Software Architecture. Lisa, Apple's new computer, also represents a major gamble for that company. With Lisa, Apple is making its first foray into IBM territory: the professional managers, executives, and administrators of major corporations.

To Steven Jobs, President of Apple, Lisa represents one more thing: "A software revolution" that will change computers and the way people relate to them.

The Lisa computer employs a system developed by the Stanford Research Institute and the Xerox Corporation called "smalltalk", in which the use of a palm-sized "mouse" bypasses many keyboard functions.

For example, if the user wants to eliminate a line of text, (s)he runs the mouse over the surface of the desk beside the computer. The cursor duplicates the movement. The user directs the cursor to run over the material to be deleted, then goes to the visual symbol that represents delete (a trash basket) and the indicated material vanishes.

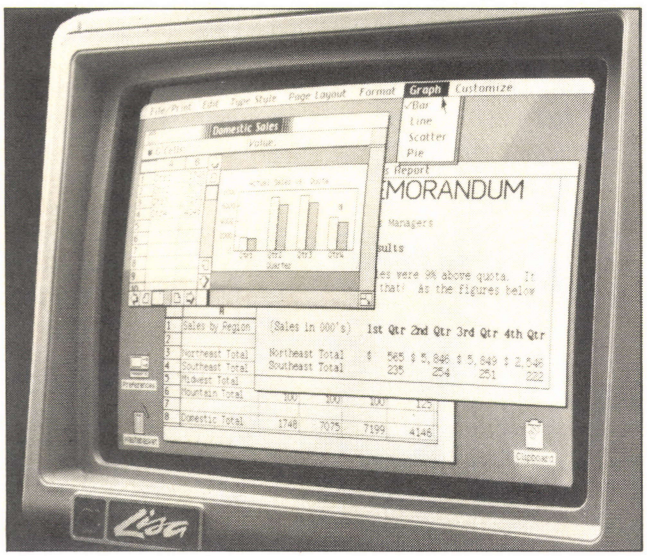
With the mouse and the symbols that frame the screen, the user can quickly change type faces, select a number of graphics and charts, and, most importantly, move information from one program to another without reprogramming.

The six, built-in, fully integrated Lisa functions are: a word processor; an electronic spreadsheet in a row and column format; bar/line, pie or scatter graphs that can appear simultaneously; a data management system; Lisaproject, which helps handle complex scheduling and resource management projects; and Lisadraw, which allows the user to draw freehand.

Apple's new Lisa computer, the first of what could become a new wave of friendly computers.

Lisa employs one of the fastest microprocessors in existence, the Motorola 6800, and contains two million characters of memory. Lisa will be able to link up with IBM mainframe computers, it will allow users to search commercial data banks such as the Dow Jones, and, as Randy Battat, product manager for the Lisa project, reveals, "Lisa can also communicate through Applenet, which will hook a bunch of Apple computers together for two purposes: to communicate and pass documents, and to share devices. One printer could serve an entire network."

Randy Battat is proud of the Lisa, which was three years in development. "It took a little longer than we expected to get everything right," he admits. "But when you embark on a revolutionary project like this, you have to expect that there are going to be things that you don't expect. We've accomplished a tremendous amount. We've written over two megabytes of software and evolved a novel architecture. The power of the applications has generally exceeded our expectations. I continue to be impressed."



Lisa's screen can display all integrated software applications simultaneously. Shown here are Lisagraph, Lisawrite, and Lisacalc. Across the top of the screen is the menu, with options available to begin the task.

The reader may well ask: why is a video and computergaming magazine so interested in a computer designed for large corporations? Randy Battat has the answer: "I think that most computers in three to five years will take on Lisa-like characteristics. It may take twenty hours to learn to use most computers today. A person can learn to use the Lisa in something like an hour. Computers are going to have to learn to be more like people, and not the other way around."

And what does a friendly computer system have to offer in the way of games? "Some people in the engineering labs developed games on the Lisa," says Battat, "and they used the mouse as a pointing device for a challenging maze game or a very powerful chess-like game. Right now, the way computer adventure games are played, the commands are all verbal. This is a natural opportunity for a mouse-like device. Seeing things and pointing to them is better than reading a text and learning the commands and worrying about spelling them correctly. And think of the fluid movement in an *Asteroids*-type space game."

If this kind of system excites you but the $10,000 price tag does not, be patient. Late in 1983, Apple will reportedly introduce the MacIntosh, a $2,000 minicomputer that will duplicate many Lisa functions.

GET THEE TO A DOGHOUSE

While you're waiting for the software revolution to hit your neighborhood, you'll still be able to find innovative programs. One company that is producing wild and witty software is Broderbund, which was founded by Doug and Gary Carlston, who were shortly joined by their sister Cathy ("broderbund" means brotherhood, we understand).

Up to a few years ago, Doug Carlston was designing games, including *Galactic Empire,* in his spare time while practicing law. "Founding the company was largely an emotional decision based on what we wanted to do with our lives," says Carlston.

"We figured, and it happened a lot sooner than we expected, that sooner or later there would be a glut on the market, and the rewards would go to the products that were perceived to be of high quality. That is the case now, but it was not two years ago."

Carlston described Broderbund's new offering for the **Apple computers** and the **Atari 400/800:**

"The Arcade Machine is a program generator and a learning tool to teach people what goes into creating an arcade game. It allows people to actually create their own games step by step. With the templates we provide they can examine an existing game and see how it works. Gradually they can work up to the stage where they're ready to create one from scratch.

"The Multi-Sound Synthesizer was created for the **Vic-20,** which has a lot of musical capability. It allows you to create a baseline, save it, then play along with one or more melodic lines. There is also a rhythm section you can set up, and you can keep a permanent record of your music."

More traditional games for the **Apple computers** and the **Atari 400/800** include:

Gumball. For the Lucy Ricardo in all of us, the player is a sorter at a gumball factory, separating fast-moving gumballs into their appropriate colors and throwing away defective gumballs. The player controls trap doors that change the patterns the balls take down various spirals, tracks, and gadgets.

If the player doesn't meet his/her quota or misplaces a ball, a supervisor enters, shakes his fist at the player-figure and throws his/her gumballs on the floor.

At the end of the day, the player goes home. If the player continues to make his/her day's quota, the home gets progressively grander, up to a castle. But if the player fails several days in a row, s(he) is in the doghouse, literally.

Loadrunner. The player is mining for gold, chased by various monsters. The strategy involves dropping through sinkholes that may fill up and trap the player or chopping one's way into refuge boxes while monsters dig their way toward you. Several levels present unique strategic problems.

Already available in the **Apple II** format, Broderbund is releasing some games newly adapted to the **Atari 400/800:**

A.E. are sting rays from space that are swarming over the player who fights back with rapid-fire missiles. The game features impressive 3-D-style graphics.

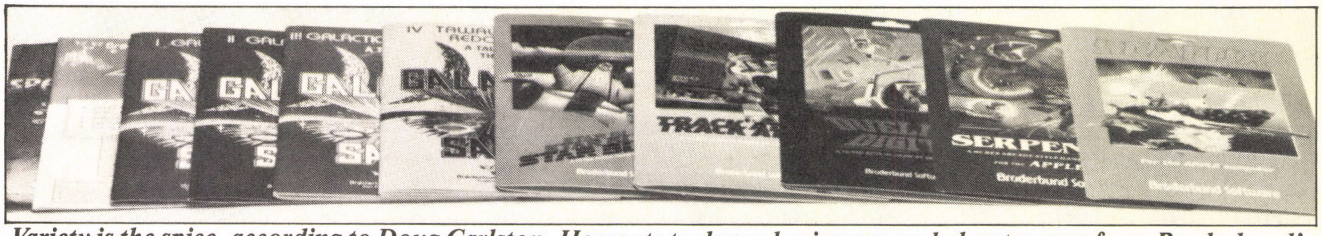
Serpentine. Serpents pursue snakes through a maze. The serpents lay eggs and fight ferociously to protect them.

The best-selling *Choplifter* and *Skyblazer* are horizontal flight combat games, as the player battles enemies on the ground and in the air.

New for the **Vic-20:**

Shark Trap. You've been thrown overboard in shark-and-octopus-infested waters with only an atomic net to aid you.

Martian Raider. You're at war with Mars, streaking over their cities at low altitude and bombing the hell out of them.



***Variety is the spice, according to Doug Carlston. He wants to deemphasize run-and-shoot games from Broderbund's line of software, in favor of such varied programs as* The Multi-Sound Synthesizer, The Bank Street Writer *(a word processor) and* The Arcade Machine.**

KILLER CHICKENS

If strafing martians is your dish, then Automatic Simulations/Epyx may be the software company for you. Destroying major cities of the world and avoiding killer chickens are but two of the activities Epyx has in store.

Founder and chairman of Automatic Simulations James Connelly likes to say that Epyx games "put the player's brain in the loop. Our games require a good deal more than just reflex."

Two new games are now available from Epyx for the **Atari 400/800** and the **Commodore 64:**

Oil Barons is a combination board game — computer game for one to nine players. Players are given four parcels of land and four million dollars with which to build an empire. Periodic auctions are held during which players divest, acquire, and presumably connive. Soaring taxes, oil fires, and pesky government regulations are a few of the obstacles to the player's rich retirement.

A detailed map board and board pieces are included with the disk. The game retails for about $100.

Jump Man contains thirty different screens which appear in a random sequence. With five skill levels and five speed settings, the player scrambles over catwalks and ladders collecting targets while avoiding monsters and robots.

Already available for the **IBM personal computer,** the **Atari** and **Apple computers,** the **TRS-80** and **Vic 20,** and now available for the **Commodore 64** are:

Upper Reaches of Apshai provides four levels and over one hundred fifty rooms. In trying to recover a sword and shield, the player must avoid giant tomatoes and killer chickens.

Crush, Crumble, and Chomp! Here the player assumes the guise of any one of six huge, man-eating monsters in over a hundred possible scenarios. The object is to annihilate either New York, San Francisco, Tokyo, or Washington D.C. (your editor's choice).

MICKEY MOUSE GOES TO MARKET

Wholesale destruction is not likely to be the theme of games from at least one newcomer to the software field: the Disney organization. Education and interaction are the notes sounded here.

"We're entering the software market a little later than some companies," admitted Fred Simon, vice president of the software division of Walt Disney Telecommunications. But Simon hastens to add that the additional research time has paid off. "The graphics are beautiful, the best I've seen for a 16K program."

Disney's first software offering will be *Mickey in the Great Outdoors,* a game in two parts for children of ages seven to nine. The two segments, *Mickey Goes Hiking* and *Mickey Goes Exploring,* will challenge the child's spelling and math skills.

Compatible with the **Atari 400/800** system, *Mickey in the Great Outdoors* is the first in a series of fifty programs. All the programs will be educational and interactive, concerned with language, health, nutrition and similar subjects, and all will test the child's logic and discrimination.

A second line of software, in development for ages fourteen to adult, are based on exhibits at the new Disney EPCOT Center in Florida.

The first of these, available in September, is called *Cosmic Carnival.* The player is the owner of an amusement park, and must try to make a finite supply of energy serve the entire park and still make a profit. A second game, *Eternal Journey,* is concerned with the workings of the human body, but other than a promise of innovative graphics, no more information was forthcoming.

Disney is designing future software programs for **Texas Instruments, Atari, Radio Shack, Nippon Electronics,** and an as-yet unreleased **Panasonic** computer.

Pictured above is Spectravideo's SV-318 computer and the SV-601 Super Expander. With the addition of the Expander, the SV-318 system can interface with as many as seven additional input-output devices simultaneously. Special slots on the Expander, which face the user, monitor the operation of the interface cards connected to the system. Spectravideo is preparing fourteen hardware accessories for the system.

THE JURY IS OUT

Spectravideo, the company that gave us the computergame *Reagonomics,* has a few more innovative products in release, including a 3D home computer game and a powerful personal computer that sells for around $300.

And though the verdict is not yet in on the quality or durability of their offerings, we have to give them points for flair.

Their latest:

The Spectravideo SV-318 computer has 32K ROM memory that is expandable to 96K, and 32K RAM memory, expandable to 144K. The system has built-in extended Microsoft Basic interpreter, sixteen-color graphics, a built-in joystick, and can be expanded with fourteen hardware accessories.

The Compumate 2600 Computer Converter is discussed more fully in the Eye On Videogames column.

Vortex is compatible with the **Atari VCS, Atari 400/800,** the **Commodore Vic-20,** and the **Texas Instruments 99/4A.** *Vortex* is a 3D space game that comes complete with 3D glasses. The player maneuvers a space ship through a meteor shower while blasting at alien ships.

CORRIDORS OF CONFUSION

A third dimension of another kind is explored in a new computergame from the Roklan Corporation. It's called *Lifespan,* and it explores the intricacies of the human mind in a playful fashion.

Compatible with the **Atari 400/800** computer, Lifespan contains five games, depending on which character the player chooses at the outset.

The first image that appears on the screen is a swirling cosmos or helix from which are born the five characters. The player chooses his character and then creates that character's personality. But don't dawdle! The longer the player takes to select personality traits, the slower the pace of the game.

The player follows the character from birth all the way to death, if the player so chooses. Examples of the game play: the character may enter a Corridor of Confusion, where (s)he is beset by Doubts and Worries. A number of cloud-like Opportunities may appear, and the character must work his/her way inside them. A Vortex of Challenges may attempt to eat portions of the character's anatomy. The player can avoid the Challenges entirely ... but there will be a penalty.

Roklan's Ron Borta promises that Lifespan "puts the player more in control. The resultant feeling is one of a fun mental exercise during which one creates rather than destroys." The game was designed, adds Borta, to avoid that game-ending stomp, chomp or kaboom that leaves the player feeling depressed.

All three Mirror Image games require 64K. Only **Tachyon** *requires a double-sided disk drive.*

MIRROR IMAGES & THE DEPRESSION

Mirror Images Software has announced three new games for the **IBM Personal Computer.**

Spyder: the player must fight off swarms of spiders either with a laser sword or with the more traditional weapon: stomping on them with an electronic foot.

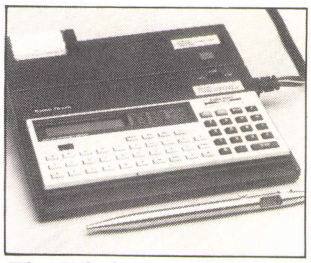
Tachyon: the player cruises deep space and blasts aliens in the *Avenger,* a starship equipped with scanners, energy field shields, lasers, and torpedoes.

Hide and Sink: a strategy game of the high seas. The player pits his/her fleet of various ships against the computer on a full color sea grid. Includes a "nighttime" option.

THE SUN NEVER SETS ON THE BUSY EXEC

For those of our readers who like to compute on the go, Radio Shack offers the TRS-80 PC-4 Pocket Computer, which is small enough to fit in a briefcase or small handbag.

The PC-4's keyboard contains fifty-three alphabetic keys and ten numeric. The twelve character LCD scrolls horizontally to contain up to sixty-two characters.



The PC-4 measures 3/8 by 6 1/2 by 2 3/4 inches.

The PC-4 boasts nine mathematical functions, twenty-five commands, fifteen further functions and Edit and Debug modes.

Ten short programs can be held in memory or fewer, longer programs can be retained.

The PC-4's 544 step, 26 variable RAM memory is expandable with an optional memory module. Other peripherals include a Cassette Interface for storing programs and a printer.

The PC-4 operates on two lithium batteries. The basic unit sells for $69.95.

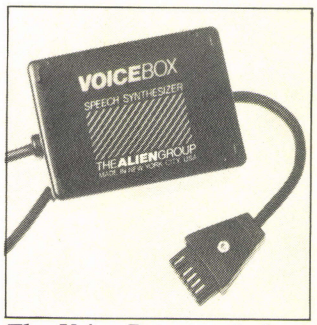
THE ALIEN GROUP SPEAKS OUT

While Radio Shack crafts its hardware smaller and smaller, a company in New York, calling itself The Alien Group, is getting louder.

Their Voice Box II (for the **Atari 400/800** computers) requires a 32K disk system. When used in concert with the appropriate software any of the following are said to be possible:

- The computer will be able to speak with inflection, and speak in foreign languages with correct foreign spelling as input.
- The computer will be able to serenade the user with voice and three-part music. Software contains a library of thirty songs.
- The user will easily be able to program new songs.
- The bottom two rows of the Atari keyboard can be converted into a piano with a range of three and a half octaves using the shift and control keys.
- Musical effects such as tremolo, vibrato and glissando can be programmed.
- A talking or singing alien or human face can be made to appear in lip-sync animation. The alien's features can be changed as the user sees fit.

Many of the above-mentioned programs are built into the unit or accompany it at no extra cost. The unit sells for around $169.



The Voice Box vocabulary is easily expandable.

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RAMblings

Continued from page 58.

Adventure in Serenia diskette."

In my case, the desert and ever-present scorpions had me stumped. I finally realized that the only way to get out of the desert was to map it, since scenes which looked alike really weren't. Leaving objects behind and later recovering them (à la Hansel and Gretel) is a good way to get your bearings.

The program is well written, the sound and graphics are very good. A particularly appealing feature of the game is the ability to save your current position and status on the disk. This enables you to start the game from where you left off rather than having to replay the earlier portions which you have already mastered. Storing the game (and your possessions) at each major challenge permits you to try various solutions (and perhaps die a few deaths) without risking all you've gained.

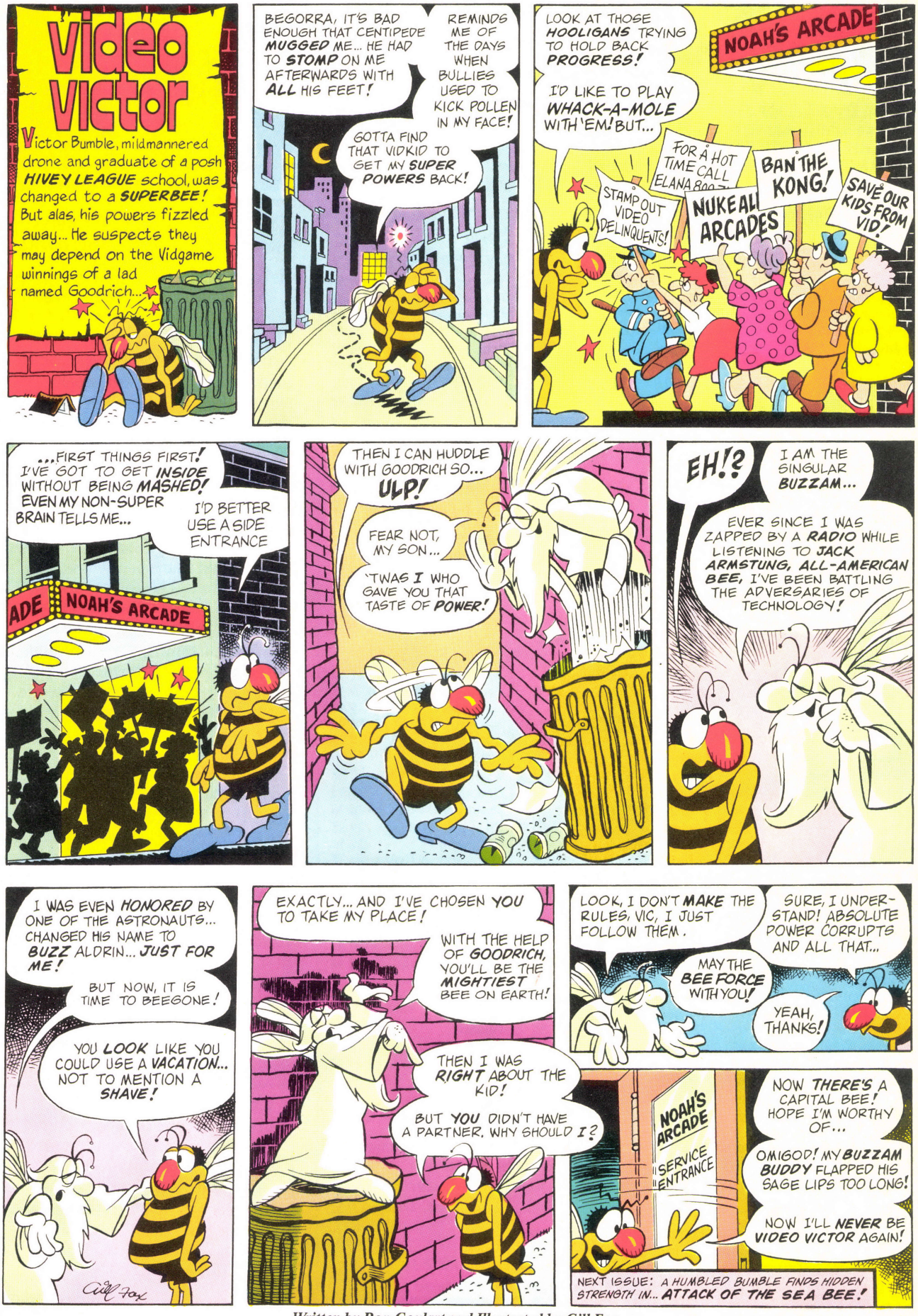
If you are new to adventure games, this is a good beginning. It's less awesome than *Time Zone* and *Ulysses and the Golden Fleece* (issue three) though that's a mark in its favor. You'll only need four months to play it through instead of eight.

And if you know how to fix leaky rowboats, you'll be more successful than I've been, perhaps saving the princess after all.

Next issue: Roberta Williams tells us how computergames are created and what to expect from the medium in the near and far future.

Correction

In our February issue we referred to H.W.H. as the manufacturer of the Pointmaster Joystick. In fact, Discwasher is the company that manufactured the Pointmaster, and we regret the error. Discwasher's address is 1407 N. Providence Road, P.O. Box 6021, Columbia, MO 65205.



Written by Ron Goulart and Illustrated by Gill Fox

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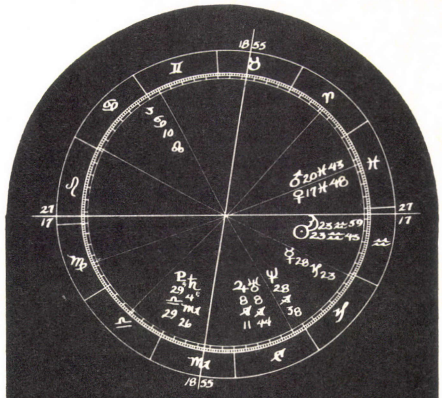

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you Read it Here First!

Suffering and anxiety ... that's what videogames have been about since the craze began. Desperate missions in space, frantic maze chases, the rescue of one in peril, the crossing of a busy thoroughfare.

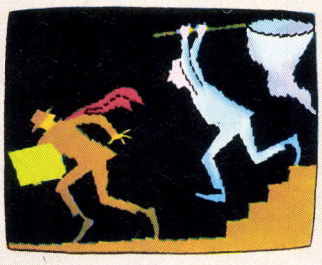
All well and good ... but who knows more about suffering than artists? And who knows more about great suffering than great artists?

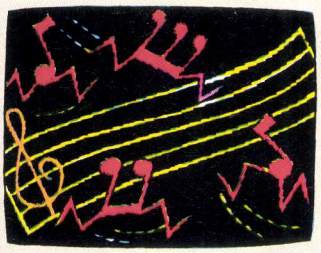
The designers of today's videogames should not forget those who virtually trained our ears to accept western music, those who defined our aesthetic in form and color, or those who created in literature the very conflicts that serve as the basis of today's games.

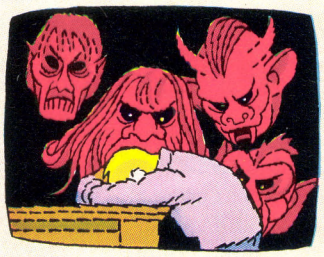
We haven't forgotten, and that's why we propose these games to America's designers.

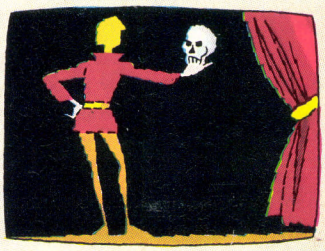
Once again, we've come up with twenty game ideas, submitted them to videogame players across the nation, and asked them to vote on their favorites.

The results are published for your amusement.









EAR TO THE GROUND

You are Vincent Van Gogh, and you must finish six paintings before you go blind or lose all your limbs.

Protected only by your kindly brother, you move across a primitive cityscape to reach peasant cottages or country landscapes. Once there, your Vincent-figure dashes across a canvas, emblazoning it with bold color.

But beware! You are being pursued by creditors and asylum marshals. Each time you are thrown into the sanitarium or debtor's prison, you lose one limb, which makes it more difficult to cope in the city.

Time is also a factor, for as the game continues you gradually lose your eyesight, your paintings become increasingly more bizarre, and even your brother will abandon you.

ACCELERANDO

Also known as the Beethoven game, a contest in which sound is as important as sight and reflex. Using sonic cues, the player must capture notes which zoom across the screen at an ever-increasing speed. The notes must be arranged to form a toccata and fugue.

Difficulties ensue as the sonic cues become increasingly dimmer and are drowned out and confused by those of squalling babies, nagging wives and gossiping servants. Eventually, all sonic cues cease and the toccata and fugue must be completed by memory selection and patterning the notes after the first stanzas.

EMILY ATTACK!

A two-player game. One player takes the role of a painfully shy and reclusive poetess. The other limns the role of an insensitive and loutish literary agent who leads an army of dilettantes, sycophants, and hacks on a siege of the poetess' country cottage.

The two-story cottage contains six windows, two doors and a revolving secret hatchway which must be sealed with chairs, boards and mute pleas. If the cottage is successfully breeched, the unfortunate poetess becomes catatonic and the agent is rewarded with fleeting fame.

KUBLAI KHAN

A two-player game that takes place in the mind of an opium-crazed poet.

Player one must move stanzas from the left of the screen to the right and there to assemble them in order. Player two controls the poet's hallucinations, which distract as well as inspire his opponent.

For each stanza that player one escorts from left to right, he uncorks more hallucinations. These fever dreams he must fight off, order, and stuff between the lines of his stanzas. Player two, meanwhile, harries player one and puts his stanzas out of order.

If enough hallucinations are allowed to accumulate outside the poem, no more stanzas can be moved. A pesky neighbor then pounds on the door, the poet awakens, and the game is over.

WHISTLER'S MOTHER

You are painting a portrait of your cranky old mother, but she won't sit still. The object of this game is to finish her portrait before your allotment of light intervals is depleted.

During each interval, the player splashes color on a canvas with his/her joystick, while monitoring mother in the main screen.

Distractions for the errant mother-figure include tea, cushions for her rocker, her afternoon constitutional, and repeated trips to the loo. You must complete these errands for her or accompany her to the loo in the brief moments when the light is imperfect, or start over again.

The game ends when either the mother is put into a home, you run out of paint, or you successfully complete the portrait. Difficulty escalates as mother grows more senile.

TOTE THAT BARD!

A maze game. You are William Shakespeare proudly bringing your latest play to the Globe theater. Dogging your trail are Marlowe and Jonson figures who want to steal your play and take the credit for it.

You consume experiences and become enriched as you run the maze ... or if you're not quick the experiences will whip around and consume you! These include sexual conquests, betrayals, fits of jealousy, doubt, and overweening pride.

Get that play to the Globe or remain a lowly actor!

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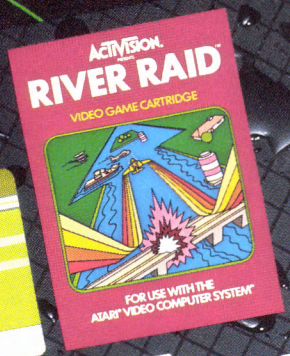
Carol Shaw, designer.



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